



DAHAI SOLAR

DAHAI SOLAR

Add: Shandong, China
 Web: www.dahaisolar.com
 Version No.: DH-EN-202509

NEW ENERGY NEW WORLD
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CHINA'S DISTRIBUTED
SOLAR LEADER

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COMPANY PROFILE

DAHAI SOLAR

Since our founding in 2011, at Dahai Solar we hold a profound belief in the power of the sun to provide clean and sustainable energy to the world. That is why we have made it our mission to manufacture premium photovoltaic cells and green energy products for businesses and consumers alike. Our team of dedicated experts works tirelessly to ensure that every single one of our photovoltaic cells is crafted to perfection, using the most advanced PV technologies available today. They produce superior energy output with optimum efficiency, meaning more energy can be produced from a smaller number of solar panels. This in turn permits end users to save on installation and maintenance costs while at the same time reducing their carbon footprint.

We implement rigorous quality control testing at every stage of the manufacturing process to make sure every panel we produce can withstand even the harshest weather conditions.

Clean energy only works if you can use it dependably and efficiently. To help achieve this, Dahai also manufactures hybrid inverters and a wide range of batteries to the same rigorous standards as our solar panels, ensuring top-notch performance and durability for a steady supply of renewable power.

So whether you need a battery to power your home or a portable energy source to take anywhere you might need it, Dahai has a solution for you.

With warehouses located in strategic locations around the globe, Dahai provides an efficient sale-to-service ecosystem, and we back up each one of our products with an industry-leading warranty and on-site support.

You can rely on our modules to generate energy for your businesses without worrying about frequent replacements or repairs. As a global leader in photovoltaic cell manufacturing, we understand every customer is different, so we will take into account all the unique factors that are most important to you, like budgets and energy production targets, while striving to help you achieve a fast return on your investment.

Dahai believes that clean energy should be made as accessible as possible to everyone on the planet. That is why we offer highly competitive pricing while still providing industry-leading products in service. We understand that the transition to clean energy is crucial to our future, and that's why we're committed to energy sustainability.

So if you're looking for a reliable and sustainable clean energy solution, look no further than Dahai Solar. At Dahai, we provide customized services and one-stop, one-to-one system solutions tailored to your specific needs.

Contact us today to learn more about how our wide range of clean energy products can benefit you and our planet.

Dahai Solar. New energy for a new world.

SOLAR PANELS BRAND CONTROLLED BY CENTRAL ENTERPRISES



A COMPREHENSIVE ENERGY SERVICE PROVIDER WITH SMART ENERGY MANAGEMENT AS ITS CORE





PROJECT CASE

DAHAI SOLAR



1.1MW PV Power Plant Project of Louisvuitton Plant in Sibiu Province, Romania



Gansu Tianju power station project 49MW



Photovoltaic inverters in European photovoltaic parks project



Laiwu Jinneng power station project 13MW



Distributed project of Dahai Group factory

QUALIFICATION

DAHAI SOLAR



DAHAI SOLAR

 IEC INTERNATIONAL ELECTROTECHNICAL COMMISSION	Ref. Certyf. No.: NE-101111
IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (COCER FOR SIGNING)	
COB TEST CERTIFICATE	
Product Name and address of the applicant Name and address of the manufacturer Name and address of the factory Other name and address (please specify character) Trademark / Brand (if any) Customer's Testing Facility (CTF) Design Model / Type Ref. Additional information (if necessary may also be reported on page 2) A sample of the product was tested and found to be in conformity with As shown in the Test Report Ref. No. This Annex Name and of this Certificate	Rechargeable Lithium Ion Phosphate Battery System Shuangshou Daheli New Energy Development Co., Ltd. Huifeng Road of Qi Road, 207500 Shuangshou Development Zone, Shandong China Far East Battery Jiangsu Co., Ltd. No. 9, Xufu Avenue, Guangzhou Town, Yangzi City, 214207, Wuxi City, China Far East Battery Jiangsu Co., Ltd. No. 9, Xufu Avenue, Guangzhou Town, Yangzi City, 214207, Wuxi City, China IT Additional information in page 2 Product data 20Ah 3.2V Lithium Ion Phosphate 20A 3.2VDC for DHA120-01-25, 307.2 VDC for DHA120-01-35, 30Ah 3.2V for DHA120-01-45, 312.0 VDC for DHA120-01-55, 61A 4.0VDC for DHA120-01-65, 718.4 VDC for DHA120-01-75, 819.2 VDC for DHA120-01-85 Rated Capacity: 30 Ah DHA 00044 DHA120-01-25, DHA120-01-35, DHA120-01-45, DHA120-01-55, DHA120-01-65, DHA120-01-75 and DHA120-01-85 IT Additional information in page 2 IEC 62659:2017 4935673.50
This Test Certificate is issued by the National Certification Body	
DEKRA Certification B.V. Meyboom 105A 6021 ML Arnhem Netherlands Date: 23 October 2022	
 Signature: C. Li	

ATTESTATION OF CONFORMITY

Issued to: **Shenzhen Catek Inc Energy Conversion Co., Ltd**
 Shoukang Straters of Qu Road, 273700 Guanyang Development Zone, Shenzhen City

For the product: **Rechargeable Lithium Ion Phosphate Battery Systems**

Trace name:

DAHAI

Type/Model:

DH-15-12-25, DH-15-12-30-15, DH-15-12-30-45, DH-15-12-30-54, DH-15-12-30-57, DH-15-20-45

Rating:

Nominal Voltage: 3.2V
 Nominal Capacity: 15Ah for DH-15-12-25, 30Ah for DH-15-12-30-15, 45Ah for DH-15-12-30-45, 54Ah for DH-15-12-30-54, 57Ah for DH-15-12-30-57, 78Ah for DH-15-20-45, 75Ah for DH-15-20-54
 Rated Capacity: 50 Ah

Manufactured by:

Fir East Battery Jiangsu Co., Ltd
 No. 8, 9th Jiangsu, Xuyuegang Town, Yuying City, 214257 Wuxi City, Jiangsu Province, China

Represented:

EN-EC-10000-A-0001
 EN-EC-10000-A-0001

This attestation is granted on account of an examination by DEKRA, the results of which are laid down in a certificate No. 161057430.

This attestation implies that the examined items are in accordance with the standards designated under the Electromagnetic Compatibility Directive (2004/108/EC).

The examination has been carried out in one single specimen or several specimens of the product submitted by the manufacturer. The attestation does not include an assessment of the manufacturer's system. Conforming of the production with the approved level is dependent on the responsibility of DEKRA.

The CE marking may be affixed on the product if all relevant and effective EC directives are complied with. Amended: 27 October 2012 Number: 49047674-2140C

DEKRA Testing and Certification (Shanghai) Co., Ltd.
 Guangming Branch

Maozhao Zhou
 Technical Manager

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DEKRA Testing and Certification (Shanghai) Co., Guangming Branch
 No. 1000, 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1025, 1026, 1027, 1028, 1029, 1030, 1031, 1032, 1033, 1034, 1035, 1036, 1037, 1038, 1039, 1040, 1041, 1042, 1043, 1044, 1045, 1046, 1047, 1048, 1049, 1050, 1051, 1052, 1053, 1054, 1055, 1056, 1057, 1058, 1059, 1060, 1061, 1062, 1063, 1064, 1065, 1066, 1067, 1068, 1069, 1070, 1071, 1072, 1073, 1074, 1075, 1076, 1077, 1078, 1079, 1080, 1081, 1082, 1083, 1084, 1085, 1086, 1087, 1088, 1089, 1090, 1091, 1092, 1093, 1094, 1095, 1096, 1097, 1098, 1099, 1100, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1114, 1115, 1116, 1117, 1118, 1119, 1120, 1121, 1122, 1123, 1124, 1125, 1126, 1127, 1128, 1129, 1130, 1131, 1132, 1133, 1134, 1135, 1136, 1137, 1138, 1139, 1140, 1141, 1142, 1143, 1144, 1145, 1146, 1147, 1148, 1149, 1150, 1151, 1152, 1153, 1154, 1155, 1156, 1157, 1158, 1159, 1160, 1161, 1162, 1163, 1164, 1165, 1166, 1167, 1168, 1169, 1170, 1171, 1172, 1173, 1174, 1175, 1176, 1177, 1178, 1179, 1180, 1181, 1182, 1183, 1184, 1185, 1186, 1187, 1188, 1189, 1190, 1191, 1192, 1193, 1194, 1195, 1196, 1197, 1198, 1199, 1200, 1201, 1202, 1203, 1204, 1205, 1206, 1207, 1208, 1209, 1210, 1211, 1212, 1213, 1214, 1215, 1216, 1217, 1218, 1219, 1220, 1221, 1222, 1223, 1224, 1225, 1226, 1227, 1228, 1229, 1230, 1231, 1232, 1233, 1234, 1235, 1236, 1237, 1238, 1239, 1240, 1241, 1242, 1243, 1244, 1245, 1246, 1247, 1248, 1249, 1250, 1251, 1252, 1253, 1254, 1255, 1256, 1257, 1258, 1259, 1260, 1261, 1262, 1263, 1264, 1265, 1266, 1267, 1268, 1269, 1270, 1271, 1272, 1273, 1274, 1275, 1276, 1277, 1278, 1279, 1280, 1281, 1282, 1283, 1284, 1285, 1286, 1287, 1288, 1289, 1290, 1291, 1292, 1293, 1294, 1295, 1296, 1297, 1298, 1299, 1300, 1301, 1302, 1303, 1304, 1305, 1306, 1307, 1308, 1309, 1310, 1311, 1312, 1313, 1314, 1315, 1316, 1317, 1318, 1319, 1320, 1321, 1322, 1323, 1324, 1325, 1326, 1327, 1328, 1329, 1330, 1331, 1332, 1333, 1334, 1335, 1336, 1337, 1338, 1339, 1340, 1341, 1342, 1343, 1344, 1345, 1346, 1347, 1348, 1349, 1350, 1351, 1352, 1353, 1354, 1355, 1356, 1357, 1358, 1359, 1360, 1361, 1362, 1363, 1364, 1365, 1366, 1367, 1368, 1369, 1370, 1371, 1372, 1373, 1374, 1375, 1376, 1377, 1378, 1379, 1380, 1381, 1382, 1383, 1384, 1385, 1386, 1387, 1388, 1389, 1390, 1391, 1392, 1393, 1394, 1395, 1396, 1397, 1398, 1399, 1400, 1401, 1402, 1403, 1404, 1405, 1406, 1407, 1408, 1409, 1410, 1411, 1412, 1413, 1414, 1415, 1416, 1417, 1418, 1419, 1420, 1421, 1422, 1423, 1424, 1425, 1426, 1427, 1428, 1429, 1430, 1431, 1432, 1433, 1434, 1435, 1436, 1437, 1438, 1439, 1440, 1441, 1442, 1443, 1444, 1

ATTESTATION OF CONFORMITY

Issued To: Shandong Qidao New Energy Development Co., Ltd
Northwest Street of No. 287, 287205 Guangdong Zone, Shouguang.

For its product: Rechargeable Lithium Ion Phosphate Battery System

Type name: DAHAI

Trade/Motor: DH-FS12-S15-AHS, DH-FS12-S15-B, DH-FS12-S15-AAS

Rating: Nominal Voltage: 41.6 V DC, No DH-FS12-S15-B; 718.8 V DC for DH-FD10-S15-B; 71.8 V DC for DH-FS12-S15-A;
Rated Capacity: 16.1 Ah

Maintained by: Far East Battery (Jiangsu) Co., Ltd.
No. 1, Kai Avenue, Gaocheng Town, Yixing City, 214207 Wuxi City, Jiangsu Province, China

Requirements: EN ISO 4987-1/13.2.2.2019 EN ISO 4987-1/13.2.2019+11 EN ISO 9001:2015
EN ISO 128 01-1/2019 EN CEI 10000-6-1/2019 EN CEI 61000-6-1/2011

Product Safety is not included in this review.

This Attestation is granted on account of an examination by DEKRA, the results of which are laid down in a unilateral form as EN ISO/TS 9001:2015.

The Attestation implies that the examined types are in accordance with the significantly designated under the Radio Equipment Directive (RED 2014/53/EU).

The examination has been carried out on one single specimen or several specimens of the product submitted for the manufacture. The Attestation does not include an assessment of the manufacturability / conformity of the production (the specimen tested by DEKRA is not the responsibility of DEKRA).

The CE marking may be affixed on the product if all relevant and effective CE directives are complied with Annexes 27 October 2013 Number: 4910574/23AOC

DEKRA Testing and Certification (Shanghai) Ltd.,
Guangzhou Branch


Wang Zhen
Certification Manager

I hereby declare that information and signing records is allowed

DEKRA Testing and Certification (Shanghai) Ltd., Guangzhou Branch
Room 15, 15/F, Tianyuan Building, Guangzhou, Guangdong, P.R. China
Tel: +86 20 3860 8888 Fax: +86 20 3860 8889 Email: shanghai@dekra.com.cn

VERIFICATION OF COMPLIANCE	
No.:	LVO-32E2300-1601601P
Applicant:	Shenzhen Dahan New Energy Development Co., Ltd. North of X. Road, West of X. Road, Dongguan Economic Development Zone, Dongguan, Shunde, China
Manufacturer:	Shenzhen Dahan New Energy Development Co., Ltd. North of X. Road, West of X. Road, Dongguan Economic Development Zone, Dongguan, Shunde, China
Product Name:	Basic Inverter
Product Description:	Inverter used in PV system
Model No.:	Hybrid, mppt, hv, hvh, hv, hv, hv, hv
Trade Mark:	
Rating:	Rated for 1000V
Protection against Electric Shock:	Class I
Additional Information:	IP 65 Inverter system: VVO 2 Software system: CPU 100 V1.0 CPU X86 V1.0 CPU X86 V1.0
Supplier's samples of the product have been tested and found to be in conformity with:	
Test Standard:	EN 62109-1:2012 EN 62109-2:2012 EN 62109-3:2012 EN 62109-4:2012
as shown in the Test Report Number(s):	EN 62109-1:1601601 EN 62109-2:1601601 EN 62109-3:1601601 EN 62109-4:1601601
This Verification of Compliance has been prepared to the applicant based on the results of tests, performed in the presence of a notified body, in accordance with the provisions of the relevant standards and the Low Voltage Directive, as well as the CE marking, as shown above. The CE marking is thus affixed only at the responsibility of the manufacturer, after completion of an EC Declaration of Conformity and conformity with all relevant CE Directives. The affixing of the CE marking signifies in addition that the manufacturer is aware of IEC and CE of the Directive are fulfilled.	
  	
This verification is issued to the company under the license conditions of license agreement and the test report shall remain valid and binding as evidence in the verification. Any unauthorized alteration, falsification or destruction of the original or any copies of this certificate is prohibited in the interest of the client. Notified Body 1001 (Dahan New Energy Development Co., Ltd.)	

SGS	
VERIFICATION OF COMPLIANCE	
No.	028102001661604P
Applicant:	Shandong Dahan New Energy Development Co., Ltd. North of 21 Road, West of Jiaxing Road, Dongying Economic Development Zone, Dongying, Shandong, China
Manufacturer:	Shandong Dahan New Energy Development Co., Ltd. North of 21 Road, West of Jiaxing Road, Dongying Economic Development Zone, Dongying, Shandong, China
Product Name:	Solar Inverter
Product Description:	Inverter used in PV system
Model No.	HY5, HY6, HY8, HY9, HY10, HY12
Trade Mark:	
Rating:	Power range 2
Intended Use:	PV System
Provisional Agent/Electrical Unit:	Class 1
Additional Information:	IP 55
Hardware version: V1.2.2	
Software version: CPU1: 0.20P V1.2.2	
CPU2: A8M V1.0.2	
Sufficient samples of the product have been tested and found to be in conformity with:	
Test Standards	IEC 62108-1:2015 IEC 62108-2:2011 IEC 62471:2013/24:2014
as shown in the:	028102001661604P
Test Report Number(s):	028102001661604P 028102001661604P 028102001661604P
This Verification of Compliance has been prepared to the applicant based on the results of tests performed by Laboratory of SGS Certification Services (hereinafter referred to as "SGS") in accordance with the terms and conditions of the contract between the parties and the terms and conditions of the contract (which can be accessed at www.sgs.com) and the results of the tests performed by the parties (which can be accessed at www.sgs.com) and the results of the tests performed by the parties (which can be accessed at www.sgs.com).	
 	
David Liu	2023-10-01
David Liu, Technical Manager	
SGS-CSTC	
Copy of the certificate is issued to SGS-CSTC Technical Services, Technical Services, Ltd. and may be used as evidence that the product is in conformity with the contract between the parties and the terms and conditions of the contract (which can be accessed at www.sgs.com) and the results of the tests performed by the parties (which can be accessed at www.sgs.com) and the results of the tests performed by the parties (which can be accessed at www.sgs.com).	

[illegible]

Dekra Testing and Certification (Singapore) Pte. Ltd. (Incorporated in Singapore) 808-11-1, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 83	
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DEKRA Testing and Certification GmbH Giesingergasse 10 D-69126 Heidelberg Germany Phone +49 6224 78-0 Fax +49 6224 78-200 Email info@dekra.com www.dekra.com/de/en	
	
Test report no.: 4010274.0A	
TEST REPORT Electromagnetic Compatibility (EMC)	
Certification of items tested: Remanufactured Lithium ions Phosphate Battery System	
Trademark: 	
Model and/or type reference: DHV15C20-35; DHV15C20-35; DHV15C30-45; DHV15C30-45; DHV15C30-45; DHV15C30-45; DHV15C30-45 Nominal Voltage	
Features: 304.1 VDC for DHV15C20-35; 327.1 VDC for DHV15C30-45; 400.1 VDC for DHV15C30-45; 512.1 VDC for DHV15C30-45; 512.1 VDC for DHV15C30-45; 718.1 VDC for DHV15C30-45; 718.1 VDC for DHV15C30-45; Rated Capacity: 30 Ah	
Applicant's name / address: Shantung Daya New Energy Development Co., Ltd. Northern Western of Qi Road, 257300 Dongying Shandong Province, China	
Test method requested, standard: EN 50665: 2017	
Verdict Summary: Tested by (name & signature): <i>Jaco Liang</i>	COMPLIANCE JACO LIANG
Approved by (name & signature): <i>Tian Yan</i>	TIAN YAN
Date of issue: 2023-10-27	
Report template no.: TRF_EMC_2017-06-China	

SHANDONG DAIHAI NEW ENERGY DEVELOPMENT CO., LTD			
Technical Report: (SECC208-0062/R2)		Q3 2013	
Issue Released: No. 14, 2013		Page 1 of 1	
SHANDONG DAIHAI NEW ENERGY DEVELOPMENT CO., LTD			
NORTHWEST BRANCH OF 500KV SHANGHAI			
DEVELOPMENT ZONE SHANDONG 25750 CHINA			
Sample Description		RECHARGEABLE LITHIUM ION PHOSPHATE BATTERY	
Vendor:	N/A	Sample Size:	1
Manufacturer:	S&A EAST BATTERY MANUFACTURING CO., LTD.	Style Name:	DAIHA110-15, DAIHA120-15, DAIHA130-15, DAIHA140-15, DAIHA150-15, DAIHA160-15, DAIHA170-15, DAIHA180-15, DAIHA190-15, DAIHA200-15, DAIHA210-15, DAIHA220-15, DAIHA230-15, DAIHA240-15, DAIHA250-15, DAIHA260-15, DAIHA270-15, DAIHA280-15, DAIHA290-15, DAIHA300-15, DAIHA310-15, DAIHA320-15, DAIHA330-15, DAIHA340-15, DAIHA350-15, DAIHA360-15, DAIHA370-15, DAIHA380-15, DAIHA390-15, DAIHA400-15, DAIHA410-15, DAIHA420-15, DAIHA430-15, DAIHA440-15, DAIHA450-15, DAIHA460-15, DAIHA470-15, DAIHA480-15, DAIHA490-15, DAIHA500-15, DAIHA510-15, DAIHA520-15, DAIHA530-15, DAIHA540-15, DAIHA550-15, DAIHA560-15, DAIHA570-15, DAIHA580-15, DAIHA590-15, DAIHA600-15, DAIHA610-15, DAIHA620-15, DAIHA630-15, DAIHA640-15, DAIHA650-15, DAIHA660-15, DAIHA670-15, DAIHA680-15, DAIHA690-15, DAIHA700-15, DAIHA710-15, DAIHA720-15, DAIHA730-15, DAIHA740-15, DAIHA750-15, DAIHA760-15, DAIHA770-15, DAIHA780-15, DAIHA790-15, DAIHA800-15, DAIHA810-15, DAIHA820-15, DAIHA830-15, DAIHA840-15, DAIHA850-15, DAIHA860-15, DAIHA870-15, DAIHA880-15, DAIHA890-15, DAIHA900-15, DAIHA910-15, DAIHA920-15, DAIHA930-15, DAIHA940-15, DAIHA950-15, DAIHA960-15, DAIHA970-15, DAIHA980-15, DAIHA990-15, DAIHA1000-15, DAIHA1010-15, DAIHA1020-15, DAIHA1030-15, DAIHA1040-15, DAIHA1050-15, DAIHA1060-15, DAIHA1070-15, DAIHA1080-15, DAIHA1090-15, DAIHA1100-15, DAIHA1110-15, DAIHA1120-15, DAIHA1130-15, DAIHA1140-15, DAIHA1150-15, DAIHA1160-15, DAIHA1170-15, DAIHA1180-15, DAIHA1190-15, DAIHA1200-15, DAIHA1210-15, DAIHA1220-15, DAIHA1230-15, DAIHA1240-15, DAIHA1250-15, DAIHA1260-15, DAIHA1270-15, DAIHA1280-15, DAIHA1290-15, DAIHA1300-15, DAIHA1310-15, DAIHA1320-15, DAIHA1330-15, DAIHA1340-15, DAIHA1350-15, DAIHA1360-15, DAIHA1370-15, DAIHA1380-15, DAIHA1390-15, DAIHA1400-15, DAIHA1410-15, DAIHA1420-15, DAIHA1430-15, DAIHA1440-15, DAIHA1450-15, DAIHA1460-15, DAIHA1470-15, DAIHA1480-15, DAIHA1490-15, DAIHA1500-15, DAIHA1510-15, DAIHA1520-15, DAIHA1530-15, DAIHA1540-15, DAIHA1550-15, DAIHA1560-15, DAIHA1570-15, DAIHA1580-15, DAIHA1590-15, DAIHA1600-15, DAIHA1610-15, DAIHA1620-15, DAIHA1630-15, DAIHA1640-15, DAIHA1650-15, DAIHA1660-15, DAIHA1670-15, DAIHA1680-15, DAIHA1690-15, DAIHA1700-15, DAIHA1710-15, DAIHA1720-15, DAIHA1730-15, DAIHA1740-15, DAIHA1750-15, DAIHA1760-15, DAIHA1770-15, DAIHA1780-15, DAIHA1790-15, DAIHA1800-15, DAIHA1810-15, DAIHA1820-15, DAIHA1830-15, DAIHA1840-15, DAIHA1850-15, DAIHA1860-15, DAIHA1870-15, DAIHA1880-15, DAIHA1890-15, DAIHA1900-15, DAIHA1910-15, DAIHA1920-15, DAIHA1930-15, DAIHA1940-15, DAIHA1950-15, DAIHA1960-15, DAIHA1970-15, DAIHA1980-15, DAIHA1990-15, DAIHA2000-15, DAIHA2010-15, DAIHA2020-15, DAIHA2030-15, DAIHA2040-15, DAIHA2050-15, DAIHA2060-15, DAIHA2070-15, DAIHA2080-15, DAIHA2090-15, DAIHA2100-15, DAIHA2110-15, DAIHA2120-15, DAIHA2130-15, DAIHA2140-15, DAIHA2150-15, DAIHA2160-15, DAIHA2170-15, DAIHA2180-15, DAIHA2190-15, DAIHA2200-15, DAIHA2210-15, DAIHA2220-15, DAIHA2230-15, DAIHA2240-15, DAIHA2250-15, DAIHA2260-15, DAIHA2270-15, DAIHA2280-15, DAIHA2290-15, DAIHA2300-15, DAIHA2310-15, DAIHA2320-15, DAIHA2330-15, DAIHA2340-15, DAIHA2350-15, DAIHA2360-15, DAIHA2370-15, DAIHA2380-15, DAIHA2390-15, DAIHA2400-15, DAIHA2410-15, DAIHA2420-15, DAIHA2430-15, DAIHA2440-15, DAIHA2450-15, DAIHA2460-15, DAIHA2470-15, DAIHA2480-15, DAIHA2490-15, DAIHA2500-15, DAIHA2510-15, DAIHA2520-15, DAIHA2530-15, DAIHA2540-15, DAIHA2550-15, DAIHA2560-15, DAIHA2570-15, DAIHA2580-15, DAIHA2590-15, DAIHA2600-15, DAIHA2610-15, DAIHA2620-15, DAIHA2630-15, DAIHA2640-15, DAIHA2650-15, DAIHA2660-15, DAIHA2670-15, DAIHA2680-15, DAIHA2690-15, DAIHA2700-15, DAIHA2710-15, DAIHA2720-15, DAIHA2730-15, DAIHA2740-15, DAIHA2750-15, DAIHA2760-15, DAIHA2770-15, DAIHA2780-15, DAIHA2790-15, DAIHA2800-15, DAIHA2810-15, DAIHA2820-15, DAIHA2830-15, DAIHA2840-15, DAIHA2850-15, DAIHA2860-15, DAIHA2870-15, DAIHA2880-15, DAIHA2890-15, DAIHA2900-15, DAIHA2910-15, DAIHA2920-15, DAIHA2930-15, DAIHA2940-15, DAIHA2950-15, DAIHA2960-15, DAIHA2970-15, DAIHA2980-15, DAIHA2990-15, DAIHA3000-15, DAIHA3010-15, DAIHA3020-15, DAIHA3030-15, DAIHA3040-15, DAIHA3050-15, DAIHA3060-15, DAIHA3070-15, DAIHA3080-15, DAIHA3090-15, DAIHA3100-15, DAIHA3110-15, DAIHA3120-15, DAIHA3130-15, DAIHA3140-15, DAIHA3150-15, DAIHA3160-15, DAIHA3170-15, DAIHA3180-15, DAIHA3190-15, DAIHA3200-15, DAIHA3210-15, DAIHA3220-15, DAIHA3230-15, DAIHA3240-15, DAIHA3250-15, DAIHA3260-15, DAIHA3270-15, DAIHA3280-15, DAIHA3290-15, DAIHA3300-15, DAIHA3310-15, DAIHA3320-15, DAIHA3330-15, DAIHA3340-15, DAIHA3350-15, DAIHA3360-15, DAIHA3370-15, DAIHA3380-15, DAIHA3390-15, DAIHA3400-15, DAIHA3410-15, DAIHA3420-15, DAIHA3430-15, DAIHA3440-15, DAIHA3450-15, DAIHA3460-15, DAIHA3470-15, DAIHA3480-15, DAIHA3490-15, DAIHA3500-15, DAIHA3510-15, DAIHA3520-15, DAIHA3530-15, DAIHA3540-15, DAIHA3550-15, DAIHA3560-15

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DHM66D50-HJT

700-725W

Ultra-high power 210 HJT double glass bifacial solar module

30 YEARS 30 YEAR LINEARITY POWER OUTPUT WARRANTY

25 YEARS 25 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY

ISO 9001:2008 ISO 14001:2004
ISO 45001:2018 TUV CE CQC
IEC 61215, IEC 61730

MECHANICAL PROPERTIES

Cell Type	210R HJT
Component Weight	38kg
Component Size	2384x1303x35mm
Number of Cells	132(6x22)
Cable Cross-Sectional Area	4mm ²
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Packaging Information	31 pcs/pallet/216Pcs per20"GP 558 pcs per 40 'HC

WORKING PARAMETERS

Maximum System Voltage	1500V (TUV)
Operating Temperature	-40°C~+ 85°C
Maximum Series Fuse Rating	35A
Application Level	ClassA

ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Model	DHM66D50-700/HJT	DHM66D50-705/HJT	DHM66D50-710/HJT	DHM66D50-715/HJT	DHM66D50-720/HJT	DHM66D50-725/HJT
Maximum Power (P _{max} /W)	700	705	710	715	720	725
Voltage at Maximum Power Point (V _{mp} /V)	41.50	41.70	41.90	42.10	42.30	42.50
Current at Maximum Power Point (I _{mp} /A)	16.87	16.91	16.95	16.98	17.02	17.06
Open Circuit Voltage (V _{oc} /V)	49.50	49.80	50.10	50.30	50.50	50.70
Short Circuit Current (I _{sc} /A)	18.02	18.09	18.16	18.34	18.30	18.37
Component Efficiency [%]	22.53%	22.70%	22.86%	23.02%	23.18%	23.34%
Power Tolerance (W)	0~+5					
Temperature Coefficient of P _{max}	-0.29%/°C					
Temperature Coefficient of V _{oc}	-0.24%/°C					
Temperature Coefficient of I _{sc}	0.04%/°C					

Standard Test Environment Irradiance 1000W/m², cell temperature 25°C, spectrum AM1.5

DHM66D50-TP

695-720W

High performance transparent N-type double glass bifacial solar module

30 YEARS 30 YEAR LINEARITY POWER OUTPUT WARRANTY

25 YEARS 25 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY

ISO 9001: Quality Management System
ISO 45001:Occupational Health And Safety Management Ststem
IEC 61215, IEC 61730

MECHANICAL PROPERTIES

Cell Type	210 N-type
Component Weight	38kg
Component Size	2384x1303x30mm
Number of Cells	132(6x22)
Cable Cross-Sectional Area	4mm ²
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Packaging Information	36 pieces/pallet 648 pieces /40 'container

WORKING PARAMETERS

Maximum System Voltage	1500V (TUV)
Operating Temperature	-40°C~+ 85°C
Maximum Series Fuse Rating	35A
Application Level	ClassA

ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Model	DHM66D50-695/TP	DHM66D50-700/TP	DHM66D50-705/TP	DHM66D50-710/TP	DHM66D50-715/TP	DHM66D50-720/TP
Maximum Power (W)	695	700	705	710	715	720
Voltage at Maximum Power Point (V _{mp} /V)	40.25	40.50	40.75	41.00	41.25	41.50
Current at Maximum Power Point (I _{mp} /A)	17.27	17.28	17.30	17.32	17.33	17.35
Open Circuit Voltage (V _{oc} /V)	48.20	48.50	48.80	49.10	49.40	49.70
Short Circuit Current (I _{sc} /A)	18.31	18.34	18.37	18.40	18.45	18.51
Component Efficiency [%]	22.37%	22.53%	22.70%	22.86%	23.02%	23.18%
Power Tolerance (W)	0~+5					
Temperature Coefficient of P _{max}	-0.29%/°C					
Temperature Coefficient of V _{oc}	-0.24%/°C					
Temperature Coefficient of I _{sc}	0.04%/°C					

Standard Test Environment Irradiance 1000W/m², cell temperature 25°C, spectrum AM1.5

DHM78D30-TP

630-660W

High performance transparent N-type double glass bifacial solar module

30 YEARS 30 YEAR LINEARITY POWER OUTPUT WARRANTY

25 YEARS 25 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY

ISO 9001: 2008 ISO 14001:2004
ISO 45001:2018 TUV CE CQC
IEC 61215, IEC 61730

MECHANICAL PROPERTIES

Cell Type	Monocrystalline-N-type
Component Weight	35.5kg
Component Size	2465x1134x30mm
Number of Cells	156(6x26)
Cable Cross-Sectional Area	4mm ²
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Packaging Information	36 pieces/pallet 576 pieces /40 'container

WORKING PARAMETERS

Maximum System Voltage	1500V (TUV)
Operating Temperature	-40°C~+ 85°C
Maximum Series Fuse Rating	30A
Application Level	ClassA

ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Model	DHM78D30-635/TP	DHM78D30-640/TP	DHM78D30-645/TP	DHM78D30-650/TP	DHM78D30-655/TP	DHM78D30-660/TP
Maximum Power (Pmax) [W]	635	640	645	650	655	660
Voltage at Maximum Power Point (VMP) [V]	47.70	47.90	48.10	48.30	48.50	48.70
Current at Maximum Power Point (Imp) [A]	13.31	13.36	13.41	13.46	13.51	13.55
Open Circuit Voltage (Voc) [V]	57.15	57.30	57.45	57.60	57.75	57.90
Short Circuit Current (Isc) [A]	13.94	14.00	14.06	14.12	14.18	14.24
Component Efficiency [%]	22.72%	22.90%	23.07%	23.25%	23.43%	23.61%
Power Tolerance	0~+5					
Temperature Coefficient of Pmax	-0.29%/°C					
Temperature Coefficient of Voc	-0.25%/°C					
Temperature Coefficient of Isc	0.044%/°C					
Standard Test Environment	Irradiance 1000W/m ² , cell temperature 25°C, spectrum AM1.5					

DHM66D60-TP

585-610W

Double glass bifacial solar module

30 YEARS 30 YEAR LINEARITY POWER OUTPUT WARRANTY

25 YEARS 25 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY

ISO 9001: 2008 ISO 14001:2004
ISO 45001:2018 TUV CE CQC
IEC 61215, IEC 61730

MECHANICAL PROPERTIES

Cell Type	210R+N-type
Component Weight	33.5kg
Component Size	2382x1134x30mm
Number of Cells	132(6x22)
Cable Cross-Sectional Area	4mm ²
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Packaging Information	36 pieces/pallet 720 pieces /40 'container

WORKING PARAMETERS

Maximum System Voltage	1500V (TUV)
Operating Temperature	-40°C~+ 85°C
Maximum Series Fuse Rating	30A
Application Level	ClassA

ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Model	DHM66D60-585/TP	DHM66D60-590/TP	DHM66D60-595/TP	DHM66D60-600/TP	DHM66D60-605/TP	DHM66D60-610/TP
Maximum Power (Pmax) [W]	585	590	595	600	605	610
Voltage at Maximum Power Point (Vmp) [V]	39.52	39.75	40.03	40.25	40.50	40.70
Current at Maximum Power Point (Imp) [A]	14.80	14.84	14.86	14.91	14.94	14.99
Open Circuit Voltage (Voc) [V]	47.50	47.70	47.90	48.10	48.30	48.90
Short Circuit Current (Isc) [A]	15.64	15.67	15.70	15.73	15.76	15.80
Component Efficiency [%]	21.64%	21.82%	22.01%	22.19%	22.38%	22.56%
Power Tolerance	0~+5					
Temperature Coefficient of Pmax	-0.30%/°C					
Temperature Coefficient of Voc	-0.25%/°C					
Temperature Coefficient of Isc	0.044%/°C					
Standard Test Environment	Irradiance 1000W/m ² , cell temperature 25°C, spectrum AM1.5					

DHM72D30-TP

580-610W

High performance transparent N-Type double glass bifacial solar module



30 YEAR LINEARITY
POWER
OUTPUT WARRANTY



25 YEARS OF EXCELLENT
PRODUCTS MATERIAL
AND PROCESS WARRANTY



ISO 9001: 2008 ISO 14001:2004
ISO 45001:2018 TUV CE CQC
IEC 61215, IEC 61730

MECHANICAL PROPERTIES

Cell Type	Monocrystalline-N-type
Component Weight	31kg
Component Size	2279x1134x30mm
Number of Cells	144(6x24)
Cable Cross-Sectional Area	4mm ²
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Packaging Information	36 pieces/pallet 720 pieces /40' container

WORKING PARAMETERS

Maximum System Voltage	1500V (TUV)
Operating Temperature	-40°C~+ 85°C
Maximum Series Fuse Rating	30A
Application Level	ClassA

ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Model	DHM72D30-580/TP	DHM72D30-585/TP	DHM72D30-590/TP	DHM72D30-595/TP	DHM72D30-600/TP	DHM72D30-605/TP	DHM72D30-610/TP
Maximum Power (Pmax) [W]	580	585	590	595	600	605	610
Voltage at Maximum Power Point (Vmp) [V]	44.45	44.75	45.05	45.25	45.45	45.65	45.85
Current at Maximum Power Point (Imp) [A]	13.05	13.07	13.10	13.15	13.20	13.25	13.30
Open Circuit Voltage (Voc) [V]	52.10	52.30	52.50	52.70	52.90	53.10	53.30
Short Circuit Current (Isc) [A]	14.31	14.37	14.41	14.47	14.53	14.59	14.65
Component Efficiency [%]	22.44%	22.64%	22.83%	23.02%	23.22%	23.41%	23.60%
Power Tolerance	0~+5						
Temperature Coefficient of Pmax	-0.29%/°C						
Temperature Coefficient of Voc	-0.25%/°C						
Temperature Coefficient of Isc	0.044%/°C						

Standard Test Environment Irradiance 1000W/m², cell temperature 25°C, spectrum AM1.5

DHM72T31-TP

555-585W

High efficiency N-type module



30 YEAR LINEARITY
POWER
OUTPUT WARRANTY



25 YEARS OF EXCELLENT
PRODUCTS MATERIAL
AND PROCESS WARRANTY



ISO 9001: 2008 ISO 14001:2004
ISO 45001:2018 TUV CE CQC
IEC 61215, IEC 61730

MECHANICAL PROPERTIES

Cell Type	Monocrystalline-N-type
Component Weight	28kg
Component Size	2279x1134x35mm
Number of Cells	144(6x24)
Cable Cross-Sectional Area	4mm ²
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Packaging Information	31 pieces/pallet 620 pieces /40' container

WORKING PARAMETERS

Maximum System Voltage	1500V DC
Operating Temperature	-40°C~+ 85°C
Maximum Fuse Current Rating	25A
Application Level	ClassA

ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

	DHM72T31-555/TP	DHM72T31-560/TP	DHM72T31-565/TP	DHM72T31-570/TP	DHM72T31-575/TP	DHM72T31-580/TP	DHM72T31-585/TP
Maximum Power (Pmax) [W]	555	560	565	570	575	580	585
Voltage at Maximum Power Point (Vmp) [V]	42.95	43.25	43.55	43.85	44.15	44.45	44.75
Current at Maximum Power Point (Imp) [A]	12.92	12.95	12.97	13.00	13.02	13.05	13.07
Open Circuit Voltage (Voc) [V]	50.10	50.30	50.50	50.70	50.90	51.10	51.30
Short Circuit Current (Isc) [A]	14.01	14.07	14.13	14.19	14.25	14.31	14.37
Component Efficiency [%]	21.48%	21.67%	21.86%	22.06%	22.25%	22.44%	22.64%
Power Tolerance	0~+5						
Temperature Coefficient of Pmax	-0.29%/°C						
Temperature Coefficient of Voc	-0.25%/°C						
Temperature Coefficient of Isc	0.044%/°C						

Standard Test Environment

Irradiance 1000W/m², cell temperature 25°C, spectrum AM1.5

DHM60D30-TP

485-510W

High performance transparent N-type double glass bifacial solar module

30 YEARS 30 YEAR LINEARITY POWER OUTPUT WARRANTY

25 YEARS 25 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY

ISO 9001: 2008 ISO 14001:2004
ISO 45001:2018 TUV CE CQC
IEC 61215, IEC 61730

MECHANICAL PROPERTIES

Cell Type	Monocrystalline-N-type
Component Weight	26kg
Component Size	1908x1134x30mm
Number of Cells	120(6x20)
Cable Cross-Sectional Area	4mm ²
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Packaging Information	36 pieces/pallet 864 pieces /40 'container

WORKING PARAMETERS

Maximum System Voltage	1500V (TUV)
Operating Temperature	-40°C~+ 85°C
Maximum Series Fuse Rating	30A
Application Level	ClassA

ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Model	DHM60D30-485/TP	DHM60D30-490/TP	DHM60D30-495/TP	DHM60D30-500/TP	DHM60D30-505/TP	DHM60D30-510/TP
Maximum Power (Pmax/W)	485	490	495	500	505	510
Voltage at Maximum Power Point (Vmp/V)	36.55	36.75	36.95	37.15	37.35	37.55
Current at Maximum Power Point (Imp/A)	13.27	13.33	13.40	13.46	13.52	13.58
Open Circuit Voltage (Voc/V)	43.50	43.70	43.90	44.10	44.30	44.50
Short Circuit Current (Isc/A)	13.87	13.93	13.99	14.05	14.11	14.17
Component Efficiency [%]	22.42%	22.65%	22.88%	23.11%	23.34%	23.57%
Power Tolerance (W)	0~+5					
Temperature Coefficient of Pmax	-0.29%/°C					
Temperature Coefficient of Voc	-0.25%/°C					
Temperature Coefficient of Isc	0.044%/°C					

Standard Test Environment Irradiance 1000W/m², cell temperature 25°C, spectrum AM1.5

DHM54D35-TP

425-450W

High performance N-Type double glass bifacial solar module

30 YEARS 30 YEAR LINEARITY POWER OUTPUT WARRANTY

25 YEARS 25 YEARS OF EXCELLENT PRODUCTS MATERIAL AND PROCESS WARRANTY

ISO 9001: Quality Management System
ISO 45001:Occupational Health And Safety Management System
IEC 61215, IEC 61730

MECHANICAL PROPERTIES

Cell Type	Monocrystalline-N-type
Component Weight	22kg
Component Size	1762x1134x30mm
Number of Cells	108(6x18)
Cable Cross-Sectional Area	4mm ²
Junction Box	IP68, 3 diodes
Connector	MC4-EVO2
Packaging Information	36 pcs/pallet/216Pcs per20"GP 936 pcs per 40 'HC

WORKING PARAMETERS

Maximum System Voltage	1500V (TUV)
Operating Temperature	-40°C~+ 85°C
Maximum Series Fuse Rating	25A
Application Level	ClassA

ELECTRICAL PERFORMANCE PARAMETERS UNDER STC

Model	DHM54D35-425/TP	DHM54D35-430/TP	DHM54D35-435/TP	DHM54D35-440/TP	DHM54D35-445/TP	DHM54D35-450/TP
Maximum Power (Pmax/W)	425	430	435	440	445	450
Voltage at Maximum Power Point (Vmp/V)	32.15	32.35	32.55	32.75	32.95	33.15
Current at Maximum Power Point (Imp/A)	13.22	13.29	13.36	13.44	13.51	13.57
Open Circuit Voltage (Voc/V)	37.35	37.55	37.75	37.95	38.15	38.35
Short Circuit Current (Isc/A)	13.94	14.01	14.08	14.15	14.21	14.28
Component Efficiency [%]	21.27%	21.52%	21.77%	22.02%	22.27%	22.52%
Power Tolerance (W)	0~+5					
Temperature Coefficient of Pmax	-0.350%/°C					
Temperature Coefficient of Voc	-0.274%/°C					
Temperature Coefficient of Isc	0.044%/°C					

Standard Test Environment Irradiance 1000W/m², cell temperature 25°C, spectrum AM1.5



Single Phase Hybrid Inverter

HyS-3/3.6/4/4.6/5/6/8K



Low Voltage Three Phase Low Voltage Hybrid Inverter

HyL8/10/12K

Model	HyS3K	HyS3.6K	HyS4K	HyS4.6K	HyS5K	HyS6K	HyS8K
Battery Input Data							
Battery Type	Lithium or lead acid battery						
Rated Battery Voltage(V)	48						
Maximum Charging Voltage(V)	≤60 (Configurable)						
Maximum Charge/Discharge Current(A)	75	90	100	110	120	120	190
PV Input Data							
Maximum DC Input Power(kw)	6	7.2	8	9.2	10	12	16
Maximum DC Input Voltage(V)	500						
MPPT Operating Voltage Range(V)	150~450						
Starting Voltage(V)	125						
Maximum Input Current(A)	18	18/18	18/18	18/18	18/18	18/18	30/18
MPPT Number	1	2	2	2	2	2	2
AC Output Parameters (On-Grid)							
Maximum Output Apparent Power (KW)	3.3	3.96	4.4	5	5.5	6	8.8
Rated Output Voltage(V)	220/230						
Rated Output Frequency(Hz)	50/60HZ						
Max. Output Current(A)	15	18	20	22	25	27	40
Output Power Factor	~1 (-0.8 leading~+0.8 lagging)						
AC Output Parameters(Off-Grid)							
Rated Output Apparent Power(VA)	3000	3600	4000	4600	5000	6000	8000
Maximum Output Apparent Power(VA)	>200%,15sec						
Rated Output Voltage(V)	220/230						
Rated Output Frequency(Hz)	50/60(±0.2%)						
Max. Output Current(A)	14	16	18	21	23	27	40
Efficiency							
Max. Efficiency(PV)	98%						
Max. Efficiency(battery)	94.5%						
Europe. Efficiency	97.5%						
Protection							
PV Input Reverse Polarity Protection	Yes						
PV Insulation Resistance Detection	Yes						
Residual Current Detection	Yes						
Output Over Current Protection	Yes						
Output Short Circuit Protection	Yes						
Output Over Voltage Protection	Yes						
Basic Data							
Operation Temperature (°C)	-25~60						
Storage Temperature (°C)	-30~65						
Relative Humidity	0~95%						
Working Altitude (m)	≤4000m (frequency-decreasing above 2000m)						
Cooling	Intelligent forced air cooling						
Noise (db)	<55						
Weight (Kg)	21.5						
Size (Width x Height x Depth) (mm)	427*554*198						
Protection Class	IP66						
Topology	HF isolation (Battery side)						

Model	HyL6K	HyL10K	HyL12K
Battery Input Data			
Battery Type		Lithium or lead acid battery	
Rated Battery Voltage(V)		48	
Maximum Charging Voltage(V)		≤60 (Configurable)	
Maximum Charge/Discharge Current(A)	190	210	250
PV Input Data			
Maximum DC Input Power(kw)	16	20	24
Maximum DC Input Voltage(V)		1000	
MPPT Operating Voltage Range(V)		200~800	
Starting Voltage(V)		150	
Maximum Input Current(A)	18/18	36/18	36/18
MPPT Number	2	2	2
AC Output Parameters (On-Grid)			
Maximum Output Apparent Power (VA)	8800	11000	13200
Rated Output Voltage(V)		380/400	
Rated Output Frequency(Hz)		50/60HZ	
Max. Output Current(A)	13.3	16.7	20
Output Power Factor		1 (0.8 leading~0.8 lagging)	
AC Output Parameters(Off-Grid)			
Rated Output Apparent Power(VA)	8000	10000	12000
Maximum Output Apparent Power(VA)		>200%,15sec	
Rated Output Voltage(V)		380/400	
Rated Output Frequency(Hz)		50/60	
Max. Output Current(A)	13.3	16.7	20
Efficiency			
Max. Efficiency(PV)		98%	
Max. Efficiency(battery)		94.5%	
Europe. Efficiency		97.5%	
Protection			
PV Input Reverse Polarity Protection		Yes	
PV Insulation Resistance Detection		Yes	
Residual Current Detection		Yes	
Output Over Current Protection		Yes	
Output Short Circuit Protection		Yes	
Output Over Voltage Protection		Yes	
Basic Data			
Operation Temperature (°C)		-25~60(>45derate)	
Storage Temperature (°C)		-30~65	
Relative Humidity		0~95%	
Working Altitude (m)		≤4000m (frequency-decreasing above 2000m)	
Cooling		Intelligent forced air cooling	
Noise (db)		<55	
Weight (Kg)		38	
Size (Width x Height x Depth) (mm)		475X683X256	
Protection Class		IP66	
Topology		HF isolation (Battery side)	



Three Phase High Voltage Hybrid Inverter

Hy-8/10/12K

Model	Hy8K	Hy10K	Hy12K
Inverter Input / Output(Grid)			
Rated Power (Input/Output)(kw)	12 / 8	14 / 10	16 / 12
Rated Voltage		380 / 400Va.c.,3W+N+PE	
Rated Frequency (Hz)		50 / 60	
Power Factor Range		0.8 leading~0.8 lagging	
Switch Time (ms)		<10	
Max.Continuous Current (Input/Output) (A a.c.)	17.4 / 11.6	20.3 / 14.5	23.2 / 17.4
Max.Output Overcurrent Protection (A a.c.)		400 / 60	
Battery			
Battery Type		Lithium / Lead-acid	
Battery Voltage Range (V d.c.)		125~800	
Rated Battery Voltage (V d.c.)	200	250	300
Max.Charge Current (A d.c.)		40	
Max.Discharge Current (A d.c.)		40	
Reverse Connect Protection		Yes	
PV Input			
No.of MPPT Tracker/ Strings		2 / 1+1	
Max.PV Input Power (kw)	12	15	18
Max.DC Voltage (v d.c.)		1000	
MPPT Voltage Range (V d.c.)		150~950	
Start-up Voltage (V d.c.)		200	
Max.Input Current/ String (A d.c.)		2*16	
Isc PV (Absolute Maximum)/ String (A d.c.)		2*24	
AC Output(EPS) / Generator			
EPS Rated Output Voltage		380 / 400Va.c.,3W+N+PE	
EPS Rated Output Frequency (Hz)		50 / 60	
EPS Rated Output Active Power (kW)	8	10	12
EPS Rated OutputApparent Power (kVA)	8	10	12
EPS Rated Output Current (A a.c.)	11.6	14.5	17.4
Overload Capacity (Off Grid)		110% 30s / 120% 10s / 150% 0.2s	
Efficiency			
MPPT Efficiency		99.90%	
Euro.Efficiency		97.50%	
Max.Efficiency		98%	
Protection & Feature			
Insulation Monitoring		Yes	
Residual Current Monitoring		Yes	
Parallel Function		Yes	
Protection Degree		IP65	
Certifications	IEC 62109-1/2, IEC 62477-1, IEC 61000-6-1, IEC 61000-6-3, EN 50549-1,VDE-AR-N 4105, OVE R25,NA/EEA-NE7-CHUNE 217001&2/NTS 631, etc.		
Other Protection	Ground fault current monitoring, Earth fault detection, Residual current(RCD)Detection etc.		
General Parameter			
Storage Temperature		-25°C~+60°C	
Operating Temperature	-25°C ~ +60°C (Linely derating to 60% when exceed +45°C ~ +60°C)		
Humidity		0%~100% (Non-condensing)	
Max.Operating Altitude(m)		4000 (>2000 Derating)	
Noise (dB)		<35	
Machine Dimensions(W*H*D)(mm)		530*600*210	
Machine Weight/N.w. (kg)		35	



Three Phase High Voltage Hybrid Inverter

Hy-29.9/30/40/50/60K

Model	Hy29.9K	Hy30K	Hy40K	Hy50K	Hy60K
Inverter Input / Output(Grid)					
Rated Power(kW)	29.9	30	40	50	60
Rated Voltage			380/400Va.c.,3W+N+PE		
Rated Frequency(Hz)			50/60		
Power Factor Range			0.8 leading~0.8 lagging		
Max.Continuous Current (Input/Output)(A a.c.)	90.8/45.4	91.2/45.6	121.6/60.8	152/76	182.4/91.2
Max.Output Overcurrent Protection (A a.c.)	68.1/64.7	68.4/65	91.2 /86.6	114/108.3	136.7/129.9
Battery					
Battery Type			Lithium / Lead-acid		
Battery Voltage Range (V d.c.)			135~850		
Rated Battery Voltage (V d.c.)	150	150	200	250	300
Max.Charge Current (A d.c.)			2*100		
Max.Discharge Current (A d.c.)			2*100		
Reverse Connect Protection			Yes		
PV Input					
No.of MPPT Tracker/Strings			4 / 2+2+2+2		
Max.PV Input Power (kW)	59.8	60	80		100
Max.DC Voltage(V d.c.)			1000		
MPPT Voltage Range (V d.c.)			150~850		
Start-up Voltage (V d.c.)			200		
Max.Input Current/ String (A d.c.)			8*20		
Isc PV (Absolute Maximum)/ String (A d.c.)			8*30		
AC Output(EPS) / Generator					
EPS Rated Output Voltage			380 / 400Va.c.,3W+N+PE		
EPS Rated Output Frequency (Hz)			50/60		
EPS Rated Output Active Power (kW)	29.9	30	40	50	60
EPS Rated Output Apparent Power (kVA)	29.9	30	40	50	60
EPS Rated Output Current (A a.c.)	45.4 / 43.2	45.6 / 43.3	60.8 / 57.7	76 / 72.2	91.2 / 86.6
Overload Capacity (Off Grid)			110% 30s / 120% 10s / 150% 0.2s		
Efficiency					
MPPT Efficiency			99.90%		
Euro.Efficiency			97.50%		
Max.Efficiency			98.5%		
Protection & Feature					
Insulation Monitoring			Yes		
Residual Current Monitoring			Yes		
Parallel Function			Yes,up to 6pcs		
Protection Degree			IP66		
Certifications	EN IEC 62477-1, EN IEC 62109-1/2, EN IEC 61000-6-2, EN50549-1/10, VDE-AR-N 4105, G99:2022, AS/NZS 477.2:2020 etc.				
Other Protection	Ground fault current monitoring, Earth fault detection, Residual current(RCD)Detection etc.				
General Parameter					
Storage Temperature			-25°C~-+60°C		
Operating Temperature	-25°C ~ +60°C (Linely derating to 60% when exceed +45°C ~ +60°C)				
Humidity			0%~100% (Non-condensing)		
Max.Operating Altitude (m)			4000		
Noise (dB)			<65		
Machine Dimensions(W*H*D)(mm)			544*880*278		
Machine Weight(N.w. (kg)			88		



Single Phase on Grid Inverter

HonS-1.5/2/2.7/3/3.3/3.6/4K

Model No	HonS1.5K	HonS2K	HonS2.7K	HonS3K	HonS3.3K	HonS3.6K	HonS4K
Input							
Max. DC Input Power	3000W	4000W	5400W	6000W	6600W	7200W	8000W
Max. DC Input Voltage				550V			
Max. DC Input Current				20A			
MPPT Voltage Range				40-550V			
Recommended MPP Operating Voltage				360V			
No. of MPPT				1			
Max. No. of Strings Per MPPT				1			
Output							
Rated Output Power	1500W	2000W	2700W	3000W	3300W	3600W	4000W
Max. Output Power	1650VA	2200VA	2970VA	3300VA	3630VA	3960W	4400VA
Max. Output Current	7.5A	10A	13.5A	15A	15A	16.5A	18.5A
Rated Grid Voltage				220/230/240V			
Grid Voltage Range				90-290Vac			
Rated Grid Frequency				50Hz/60Hz			
Grid Frequency Range				45-55Hz/55-65Hz			
THD				<3% (Under rated power)			
Power Factor		>0.99 (Under rated power) / Adjustable range: 0.8 leading-0.8 lagging					
DC Current Injection				<0.5% (Under rated power)			
System Data							
Max. Efficiency				98.00%			
Euro. Efficiency				97.00%			
Humidity Range				0-100% non-condensing			
Cooling Type				Natural cooling			
Temperature Range				-25~+60°C			
Power Consumption at Night				<1W			
Max. Working Altitude				4000m			
Display				LED(optional: LCD)			
Communication Interface				WIFI(optional: RS485 or GPRS)			
Protection							
DC Reverse-Polarity Protection				Yes			
Short Circuit Protection				Yes			
Output Over Current Protection				Yes			
Output Over Voltage Protection				Yes			
Insuation Resistance Monitoring				Yes			
Residual Current Detection				Yes			
Surge Protection				Yes			
Grid Monitoring				Yes			
Islanding Protection				Yes			
Temperature Protection				Yes			
Integrated DC Switch				Optional			
Mechanical Data							
Dimensions (W*H*D)				295*210*120mm			
Weight				5.5kg			
Protection Class				IP66			



Single Phase on Grid Inverter

HonS-4/5/6/8/10K

Model No.	HonS4K	HonS5K	HonS6K	HonS8K	HonS10K
Input					
Max. DC Input Power	6000W	7500W	9000W	12000W	15000W
Max. DC Input Voltage			550V		
Max. DC Input Current	20/20A	20/20A	20/20A	20/26A	20/30A
MPPT Voltage Range			80-550V		
Recommended MPP Operating Voltage			360V		
No. of MPPT			2		
Max. No. of Strings Per MPPT		1/1		1/2	
Output					
Rated Output Power	4000W	5000W	6000W	8000W	10000W
Max. Output Power	4.4kVA	5.5kVA	6.6kVA	8.8kVA	11kVA
Max. Output Current	20A	25A	27.3A	36.4A	45.5A
Rated Grid Voltage			230V		
Grid Voltage Range			160~270Vac (adjustable)		
Rated Grid Frequency			50Hz/60Hz		
Grid Frequency Range			45~55Hz/55~65Hz		
THD			<2% (Under the rated power)		
Power Factor	>0.99 (Under the rated power) /Adjustable range: 0.8 leading~0.8 lagging				
DC Current Injection			<0.5% (Under the rated power)		
System Data					
Max. Efficiency	98.1%	97.5%	98.1%	97.5%	98.1%
Euro. Efficiency	97.5%	98.1%	97.5%	98.1%	97.6%
Humidity Range			0-100% non-condensing		
Cooling Type		Natural cooling		Intelligent forced air cooling	
Temperature Range			-25~+60°C		
Power Consumption at Night			<1W		
Max. Working Altitude			4000m		
Display			LED(optional: LCD)		
Communication Interface			WIFI(optional: RS485 or GPRS)		
Protection					
DC Reverse-Polarity Protection			Yes		
Short Circuit Protection			Yes		
Output Over Current Protection			Yes		
Output Over Voltage Protection			Yes		
Insulation Resistance Monitoring			Yes		
Residual Current Detection			Yes		
Surge Protection			Yes		
Grid Monitoring			Yes		
Islanding Protection			Yes		
Temperature Protection			Yes		
Integrated DC Switch			Yes		
Mechanical Data					
Dimensions (W*H*D)		347*368*167mm		347*368*190mm	
Weight		10kg		11kg	
Protection Class			IP66		



Three Phase on Grid Inverter

HonT-6/8/10/12/15/17K

Model No.	HonT6K	HonT8K	HonT10K	HonT12K	HonT15K	HonT17K
Input						
Max. DC Input Power	9000W	12000W	15000W	18000W	22500W	25500W
Max. DC Input Voltage			1100V			
Max. DC Input Current		20/20A			20/30A	
MPPT Voltage Range			180-1000V			
Recommended MPP Operating Voltage			650V			
No. of MPPT		2			2	
Max. No. of Strings Per MPPT		1/1			1/2	
Output						
Rated Output Power	6000W	8000W	10000W	12000W	15000W	17000W
Max. Output Power	6.6kVA	8.8kVA	11kVA	13.2kVA	16.5kVA	17.7kVA
Max. Output Current	10A	13.3A	16.7A	20A	24A	28.3A
Rated Grid Voltage			400V			
Grid Voltage Range			310-480Vac			
Rated Grid Frequency			50Hz/60Hz			
Grid Frequency Range			45~55Hz/55~65Hz			
THD			<2% (Under the rated power)			
Power Factor	>0.99 (Under the rated power)/Adjustable range: 0.8 leading~0.8 lagging					
DC Current Injection			<0.5%(Under the rated power)			
System Data						
Efficiency	98.5%	98.5%	98.6%	98.7%	98.7%	98.7%
Euro. Efficiency	98%	98%	98.2%	98.1%	98.2%	98.2%
Humidity Range			0~100%, non-condensing			
Cooling Type			Intelligent forced air cooling			
Temperature Range			-25~60℃			
Power Consumption at Night			<1W			
Max. Working Altitude			4000m			
Display			LED(optional: LCD)			
Communication Interface			WIFI(optional: RS485 or GPRS)			
Protection						
DC Reverse-Polarity Protection			Yes			
Short Circuit Protection			Yes			
Output Over Current Protection			Yes			
Output Over Voltage Protection			Yes			
Insulation Resistance Monitoring			Yes			
Residual Current Detection			Yes			
Surge Protection			Yes			
Grid Monitoring			Yes			
Islanding Protection			Yes			
Temperature Protection			Yes			
Integrated DC Switch			Yes			
Mechanical Data						
Dimensions (W*H*D)			427*450*204mm			
Weight			15kg			
Protection Class			IP66			



Three Phase on Grid Inverter

HonT-20/23/25/28K

Model No.	HonT20K	HonT23K	HonT25K	HonT28K
Input				
Max. DC Input Power	30000W	34500W	37500W	42000W
Max. DC Input Voltage		1100V		
Max. DC Input Current	30/30A		40/30A	40/40A
MPPT Voltage Range		180-1000V		
Recommended MPP Operating Voltage		650V		
No. of MPPT		2		
Max. No. of Strings Per MPPT		2/2		
Output				
Rated Output Power	20000W	23000W	25000W	28000W
Max. Output Power	22kVA	25.3kVA	27.5kVA	30.8kVA
Max. Output Current	32A	36.5A	41A	45A
Rated Grid Voltage		400V		
Grid Voltage Range		310-480Vac		
Rated Grid Frequency		50Hz/60Hz		
Grid Frequency Range		45~55Hz/55~65Hz		
THD		<2% (Under the rated power)		
Power Factor	>0.99 (Under the rated power) / Adjustable range: 0.8 leading~0.8 lagging			
DC Current Injection		<0.5% (Under the rated power)		
System Data				
Max. Efficiency		98.8%		
Euro. Efficiency		98.2%		
Humidity Range		0~100%, non-condensing		
Cooling Type		Intelligent forced air cooling		
Temperature Range		-25~+60°C		
Power Consumption at Night		<1W		
Max. Working Altitude		4000m		
Display		LED(optional: LCD)		
Communication Interface		WIFI(optional: RS485 or GPRS)		
Protection				
DC Reverse-Polarity Protection		Yes		
Short Circuit Protection		Yes		
Output Over Current Protection		Yes		
Output Over Voltage Protection		Yes		
Insulation Resistance Monitoring		Yes		
Residual Current Detection		Yes		
Surge Protection		Yes		
Grid Monitoring		Yes		
Islanding Protection		Yes		
Temperature Protection		Yes		
Integrated DC Switch		Yes		
Mechanical Data				
Dimensions (W*H*D)		427*450*204mm		
Weight		18kg		
Protection Class		IP66		



Three Phase on Grid Inverter

HonT-30/33/36/40/45/50K

Model No.	HonT30K	HonT33K	HonT36K	HonT40K-Plus	HonT45K	HonT50K
Input						
Max. DC Input Power	45000W	49500W	54000W	60000W	67500W	75000W
Max. DC Input Voltage	1100W					
Max. DC Input Current	40/40/20A	40/40/20/20A		40/40/20/20A	40/40/20/20A	
MPPT Voltage Range	200-1000V					
Recommended MPP Operating Voltage	650V					
No. of MPPT	3			4		
Max. No. of Strings Per MPPT	2					
Output						
Rated Output Power	30000W	33000W	36000W	40000W	45000W	50000W
Max. Output Power	33kVA	36.3kVA	39.6kVA	44kVA	49.5kVA	55kVA
Max. Output Current	48A	53A	56A	65A	72A	80A
Rated Grid Voltage	400Vac					
Grid Voltage Range	310-480Vac					
Rated Grid Frequency	50Hz/60Hz					
Grid Frequency Range	45-55Hz/55-65Hz					
THD	<2% (Under rated power)					
Power Factor	>0.99 (Under rated power) / Adjustable range: 0.8 leading-0.8 lagging					
DC Current Injection	<0.5% (Under rated power)					
System Data						
Max. Efficiency	98.6%	98.6%	98.6%	98.6%	98.6%	98.7%
Euro. Efficiency	98.1%	98.1%	98.1%	98.2%	98.2%	98.2%
Humidity Range	0~100% non-condensing					
Cooling Type	Intelligent forced air cooling					
Temperature Range	-25~+60°C					
Power Consumption at Night	<1W					
Max. Working Altitude	4000m					
Display	LED(optional: LCD)					
Communication Interface	WIFI(optional: RS485 or GPRS)					
Protection						
DC Reverse-Polarity Protection	Yes					
Short Circuit Protection	Yes					
Output Over Current Protection	Yes					
Output Over Voltage Protection	Yes					
Insulation Resistance Monitoring	Yes					
Residual Current Detection	Yes					
Surge Protection	Yes					
Grid Monitoring	Yes					
Islanding Protection	Yes					
Temperature Protection	Yes					
Integrated DC Switch	Yes					
Mechanical Data						
Dimensions (W*H*D)	610*564*218mm					
Weight	37kg					
Protection Class	IP66					



Three Phase on Grid Inverter

HonT-80/90/100/110/125K

Model No.	HonT80K	HonT90K	HonT100K	HonT110K	HonT125K
Input					
Max. DC Input Power	120kW	135kW	150kW	165kW	187.5kW
Max. DC Input Voltage			1100V		
Max. DC Input Current	30A*8	30A*9	30A*10	30A*10	30A*10
MPPT Voltage Range			200~1000V		
Recommended MPP Operating Voltage			600V		
No. of MPPT	8	9	10	10	10
Max. No. of Strings Per MPPT			2		
Output					
Rated Output Power	80kW	90kW	100kW	110kW	125kW
Max. Output Power	88kVA	99kVA	110kVA	121kVA	137.5kVA
Max. Output Current	127A	142.9A	158.8A	174.6A	199.3A
Rated Grid Voltage			400V		
Grid Voltage Range			310~480Vac		
Rated Grid Frequency			50Hz/60Hz		
Grid Frequency Range			45~55Hz/55~65Hz		
THD			< 2% (Under the rated power)		
Power Factor	> 0.99 (Under rated power) / Adjustable range: 0.8 leading-0.8 lagging				
DC Current Injection			< 0.5% (Under the rated power)		
System Data					
Max. Efficiency	98.6%	98.6%	98.7%	98.7%	98.9%
Euro. Efficiency	98.1%	98.1%	98.1%	98.1%	98.2%
Humidity Range			0-100% non-condensing		
Cooling Type			Intelligent forced air cooling		
Temperature Range			-25~+60°C		
Power Consumption at Night			< 1W		
Max. Working Altitude			4000m		
Display			LED(optional: LCD)		
Communication Interface			WIFI(optional: RS485 or GPRS)		
Protection					
DC Reverse-Polarity Protection			Yes		
Short Circuit Protection			Yes		
Output Over Current Protection			Yes		
Output Over Voltage Protection			Yes		
Insulation Resistance Monitoring			Yes		
Residual Current Detection			Yes		
Surge Protection			Yes		
Grid Monitoring			Yes		
Islanding Protection			Yes		
Temperature Protection			Yes		
Integrated DC Switch			Yes		
Mechanical Data					
Dimensions (W*H*D)			1050*620*333mm		
Weight			85kg		
Protection Class			IP66		



High Voltage Three Phase on Grid Inverter

HonT-100/125/136K-HV

Model No.	HonT100K-HV	HonT125K-HV	HonT136K-HV
Input			
Max. DC Input Power	150kW	187.5kW	204kW
Max. DC Input Voltage		1100V	
Max. DC Input Current		30A*10	
MPPT Voltage Range		200~1000V	
Recommended MPP Operating Voltage		720V	
No.of MPPT		10	
Max. No. of Strings Per MPPT		2	
Output			
Rated Output Power	100kW	125kW	136kW
Max. Output Power	110kVA	138kVA	150kVA
Max. Output Current	127A	158.8A	172.6A
Rated Grid Voltage		500V	
Grid Voltage Range		422~550Vac	
Rated Grid Frequency		50Hz/60Hz	
Grid Frequency Range		45~55Hz/55~65Hz	
THD		< 2% (Under the rated power)	
Power Factor	>0.99 (Under rated power) / Adjustable range: 0.8 leading-0.8 lagging		
DC Current Injection		< 0.5% (Under the rated power)	
System Data			
Max. Efficiency	98.9%	98.9%	98.9%
Euro. Efficiency	98.3%	98.4%	98.4%
Humidity Range		0-100% non-condensing	
Cooling Type		Intelligent forced air cooling	
Temperature Range		-25~+60℃	
Power Consumption at Night		< 1W	
Max. Working Altitude		4000m	
Display		LED(Optional: LCD)	
Communication Interface		WIFI(Optional: RS485 or GPRS)	
Protection			
DC Reverse-Polarity Protection		Yes	
Short Circuit Protection		Yes	
Output Over Current Protection		Yes	
Output Over Voltage Protection		Yes	
Insulation Resistance Monitorng		Yes	
Residual Current Detection		Yes	
Surge Protection		Yes	
Grid Monitoring		Yes	
Islanding Protection		Yes	
Temperature Protection		Yes	
Integrated DC Switch		Yes	
Mechanical Data			
Dimensions (W*H*D)		1050*620*333mm	
Weight		85kg	
Protection Class		IP66	



DH-CNB-231005



Product Parameters	
Product Model	DH-CNB-231005
Nominal Voltage	51.2V
Rated Capacity	104Ah
Operating Voltage	42V~58.4V
Standard Charging Current	50A
Max. Charging Current	100A
Max. Discharge Current	100A
Working Temperature	0~40℃(Charging)-20~40℃(Discharging)
Storage Temperature	65%±20RH-10℃~35℃(1 month)25℃±2(3 months)
Communication	CAN/RS485
Cycle Life	>6000 cycles@25℃50A charge and discharge 90%DOD
Altitude	0~3000
Waterproof Level	IP20
Humidity Range	5%~80%
Packaging Information	Net size: 580*460*172.4mm Carton packing: 630*500*260mm Pallet(1*1.1*1.2m)per pallet: 14 boxes 20-foot container: 150boxes40-foot container: 300boxes
Weight/kg	Net weight: 48±3 Packing weight: 50

DHLV-LFP-5000

Wall-Mounted Residential ESS



Safety
-LiFePO4 safe battery chemistry
-Smart built-in BMS and comprehensive hardware protection



Expandability
-Support up to 6 PACKs in parallel connection



Accuracy
-Dynamic SOC calibration



Durability
6,000 cycles at 95% DOD



Compatibility
-Compatible with most mainstream inverters
-Compact furniture style, suitable for wallmounting that saves installation space



Certificates
CE, IEC62619, UN38.3, MSDS



Model	DHLV-LFP-5000
Total Energy*	5.12kWh
Usable Energy(DC)*	4.86kwh
Voltage	44.8~57.6Vdc
Nominal Voltage	51.2Vdc
Rated Capacity	100Ah
Max. Charge Voltage	57.6Vdc
Nominal Discharging Current	80A(1P)/1160A(2P)/160A(3P)/160A(4P)/160A(5P)/160A(6P)
Nominal Charging Current	50A(1P)/1100A(2P)/150A(3P)/160A(4P)/160A(5P)/160A(6P)
Weight	47kg
Dimension(mm)(H*L*W)	640*420*161.5mm
Max.recommended DOD	95%
Operating Condition	Indoor
Charging Temperature	0~55℃
Discharging Temperature	0~55℃
Standard Ambient Temperature Range	0~40℃
Storage Temperature Range	>1 month 0~35℃/≤1 month -20~45℃
Humidity	5%~95%(RH)(No Condensation)
Over Voltage Category	II
Cooling Type	Natural cooling
Case Material	Metal
Installation	Wall-mounted or floor-standing
IP Rating	IP 20
Protective Class	I
Max. Connection Number	6P
Communication	CAN/RS485
Battery Protection	Over-current/Over-voltage/Short circuit/ Under-voltage/Over-temperature
Certificates	CE,IEC62619,IEC61000-6-1,IEC61000-6-3,IEC62040,IEC63056,UN38.3,MSDS
Warranty	10 years (5 free warranty + 5 paid warranty)



DH-280T15



Items	Specifications
Rated Energy(kWh)	14.336KWh
Configuration	1P16S
Nominal Voltage(V)	51.2V
Working Voltage(V)	42V~58.4V
Nominal Capacity(Ah)	280Ah
Rated Charge/ Discharge Current(A)	100A @25± 2℃
Maximum Charging Current	200A@25± 2℃
Maximum Discharging Current	200A @25± 2℃
Working Temperature	0 - 4 0℃(Charge) - 2 0 - 4 0℃(Discharge)
Humidity(%)	5~80%
Altitude Limited(m)	0-3000m
Weight(Kg)	113Kg± 3kg
Dimension(mm)	817×412×267mm
Cycle Life	6000 cycles @25℃ 100ACharge and discharge current 80%DOD
IP Grade	IP20
Communication Mode	CAN&RS485

DH-314T16R



Items	Specifications
Rated Energy(kWh)	16.076KWh
Configuration	1 P16S
Nominal Voltage(V)	51.2V
Working Voltage(V)	45.2V~57.2V
Nominal Capacity(Ah)	314 Ah
Rated Charge/ Discharge Current(A)	150A @25+2°C
Maximum Charging Current	200A@25±2°C
Maximum Discharge Current	200A @25+ 2°C
Working Temperature	0-40°C(Charge)-20-40°C(Discharge)
Humidity(%)	5~80%
Altitude Limited(m)	0-3000m
Weight(Kg)	123Kg± 3kg
Dimension(mm)	817x415x267mm
Cycle Life	6000 cycles @25°C150ACharge and discharge current 80%DOD
IP Grade	IP20
Communication Mode	CAN&RS485

DHV-DS-100

Stack-Mounted Residential ESS



Safety
LFP Battery, Intelligent BMS and protective hardware providing complete protection



Easy Installation
Modular design, stackable up to 21 packs



Beauty
Furniture style that goes together with your home



Durability
6,000 cycles at 90% DOD



Compatibility
Suitable for most mainstream inverters



Certificates
CE, EMC, IEC62619, IEC62477, UN38.3, MSDS

Model	DHV-DS-100					
Battery Type	LFP					
Number of Connection	2pcs	3pcs	4pcs	5pcs	6pcs	7pcs
Total Energy	10.44kWh	15.67kWh	20.89kWh	26.11kWh	31.33kWh	36.56kWh
Usable Energy	9.92kWh	14.88kWh	19.85kWh	24.81kWh	29.77kWh	34.73kWh
Max.Parallel Strings	3P					
Voltage	102.4V	153.6V	204.8V	256V	307.2V	358.4V
Nominal Charging Voltage	115.2V	172.8V	230.4V	288V	345.6V	403.2V
Max. Charging/Discharging Current	50A					
Discharge Cut-off Voltage	89.6V	134.4V	179.2V	224V	268.8V	313.6V
Battery Efficiency	95%					
Maximum Recommended DOD	95%					
Communication	RS485/CAN					
IP Rating	IP55					
Operating Temperature	-10~50°C					
Altitude	≤5,000m					
Humidity	5% ~ 95%					
Warranty	10 years					
Dimension	720*420*608mm	720*420*758mm	720*420*908mm	720*420*1058mm	720*420*1208mm	720*420*1358mm
Net Weight	113kg	163kg	213kg	263kg	313kg	363kg
Certificates	CE, EMC, IEC62619, IEC62477, UN38.3, MSDS					

VERTICAL RESIDENTIAL ALL-IN-ONE ESS

Model	Ares 3KAL	Ares 3.6KAL	Ares 4KAL	Ares 4.6KAL	Ares 5KAL	Ares 5.5KAL	Ares 6KAL
PV Input							
Max. Input Power	4.5kW	5.4kW	6.0kW	6.9kW	7.5kW	8.3kW	9.0kW
Max. PV Voltage				550V			
MPPT Range				80-500V			
Full MPPT Range	90-500V	110-500V	120-500V	130-500V	150-500V	160-500V	170-500V
Normal Voltage				360V			
Startup Voltage				100V			
Max. Input Current				18.5x2A			
Max. Short Current				26x 2A			
No. of MPP Tracker / No. of PV String				2/2			
Battery Port							
Max. Charge/Discharge Power	3.0kW	3.6kW	4.0kW	4.6kW	5.0kW	5.5kW	6.0kW
Max. Charge/Discharge Current	80A				120A		
Battery Normal Voltage				51.2Vd.c.			
Battery Voltage Range				40- 60Vd.c.			
Battery Type				Li-ion / Lead-acid etc.			
AC Grid							
Max. Continuous Current	14.0A	17.0A	19.0A	22.0A	23.0A	26.0A	28.0A
Max. Continuous Power	3.0kVA	3.6kVA	4.0kVA	4.6kVA	5.0kVA	5.5kVA	6.0kVA
Nominal Grid Current	13.7/13.1A	16.4/15.7A	18.2/17.4A	21.0/20.0A	22.8/21.8A	25.0/24.0A	27.3/26.1A
Nominal Grid Voltage				198 to 242 @ 220/207 to 253 @ 230 V			
Nominal Grid Frequency				50/60 Hz			
Power Factor				0.999 (Adjustable from 0.8 overexcited to 0.8 underexcited)			
Current THD				<3%			
AC Load Output(Back-up)							
Max. Continuous Current	14.0A	17.0A	19.0A	22.0A	23.0A	26.0A	28.0A
Max. Continuous Power	3.0kVA	3.6kVA	4.0kVA	4.6kVA	5.0kVA	5.5kVA	6.0kVA
Max. Peak Current (10min)	20.5/19.6A	24.6/23.5A	27.3/26.1A	31.4/30A	34.1/32.7A	37.8/36.1A	41.0/39.2A
Max. Peak Power (10min)	4.5kVA	5.4kVA	6.0kVA	6.9kVA	7.5kVA	8.3kVA	9.0kVA
Nominal AC Voltage L-N				220/230Vd.c.			
Nominal AC Frequency				50/60 Hz			
Switching Time				<10ms			
Voltage THD				<3c			
Efficiency							
CEC Efficiency		97.0 %				98.1 %	
Max. Efficiency		97.6 %				98.1 %	
PV to Bat. Efficiency		98.1 %				98.1 %	
Bat. between AC Efficiency		96.8 %				96.8 %	

Model	Ares 3KAL	Ares 3.6KAL	Ares 4KAL	Ares 4.6KAL	Ares 5KAL	Ares 5.5KAL	Ares 6KAL
Protection							
PV Reverse Polarity Protection					Yes		
Over Current/Voltage Protection					Yes		
Anti-Islanding Protection					Yes		
AC Short Circuit Protection					Yes		
Residual Current Detection					Yes		
Ground Fault Monitoring					Yes		
Insulation Resister Detection					Yes		
PV Arc Detection					Yes		
Enclosure Protect Level					IP65 / NEMA4X		
General Data							
Dimensions (L*W*H)					600x430x210mm		
Weight					25kg		
Topology					Transformerless		
Cooling					Intelligent Fan		
Relatively Humidity					0-100 %		
Operating Temperature Range					-25 to 60 ° C		
Operating Altitude					≤2000 m		
Noise Emission					<25dB		
Standby Consumption					<10W		
Mounting					Wall Bracket		
Communication with RSD					SUNSPEC		
Display & Communication Interfaces					LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G		
Certification & Approvals					NRS097, G98/G99, EN50549-1, C10/C11, AS4777.2, VDE-AR-N4105, VDE0126, IEC62109-1, IEC62109-2		
EMC					EN61000-6-2, EN61000-6-3		

Battery Cell Technology	DH-LFP-VLV					
Number of Pack	1pcs	2pcs	3pcs	4pcs	5pcs	6pcs
Usable Energy*	4.87kWh	9.73kWh	14.6kWh	19.46kWh	24.32kWh	29.19kWh
Voltage Range				44.8~57.6Vd.c		
Nominal Voltage				51.2Vd.c.		
Max. Charge Voltage				57.6Vd.c.		
Max. Continuous Charging Current	50A	100A	150A	160A	160A	160A
Max. Continuous Discharge Current	50A	100A	150A	160A	160A	160A
DOD				95%		
Communication				CAN/WIFI		
Dimension(L*W*H)	(600±2) * (215±2) * (360±3) mm	(600±2) * (215±2) * (680±5) mm	(600±2) * (215±2) * (1000±7) mm	(600±2) * (215±2) * (1320±9) mm	(600±2) * (215±2) * (1640±9) mm	(600±2) * (215±2) * (1960±9) mm
Net Weight	(49±2) kg	(95±4) kg	(141±6) kg	(187±6) kg	(234±6) kg	(280±6) kg
Operating Condition				Indoor or outdoor		
Operating Charging Temperature				0~50 °C		
Discharging Temperature				-15~50 °C		
Humidity				15%~85% RH (No Condensation)		
Cooling Type				Natural		
Installation Method				IP66		
Heating film power(W)(optional)				Stacked installation		
Supply connection				130W		
WiFi				Fixed power cord		
Warranty				Yes		
Configuration				10 years (5 free warranty + 5 paid warranty)		
				IEC62619,IEC63056,IEC61000-6-1,IEC61000-6-3,IEC62477-1,IEC60730,IEC62040,UN38.3,MSDS		

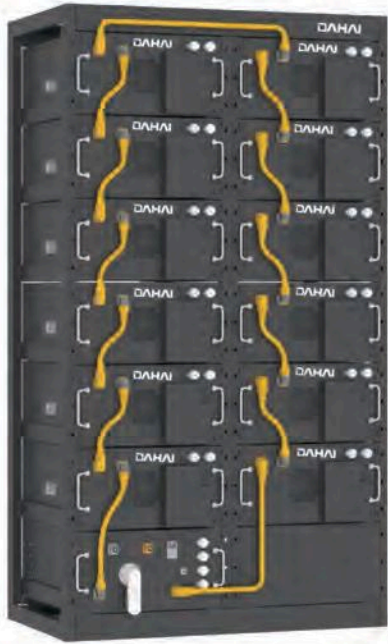
VERTICAL RESIDENTIAL ALL-IN-ONE ESS – HV SERIES



Model	DH-LFP-VHV-9	DH-LFP-VHV-13	DH-LFP-VHV-18	DH-LFP-VHV-23
Number of Pack (pcs)	2	3	4	5
Total Energy (kWh)	9.21	13.82	18.43	23.04
Usable Energy* (kWh)	8.74	13.12	17.50	21.88
Voltage Range (Vd.c)	112~144	168~216	224~288	280~360
Nominal Voltage (V)	128	192	256	320
Charging Voltage Declared by Manufacturer (V)	144	216	288	360
Nominal Charging Current (A)		30		
Nominal Discharge Current (A)		30		
DOD (%)		95		
Communication		CAN/RS485		
Dimension ((L*W*H),mm)	(600±2)* (210±2)* (610±3)	(600±2)* (210±2)* (895±5)	(600±2)* (210±2)* (1180±7)	(600±2)* (210±2)* (1465±9)
Net Weight (kg)	(105±2)	(149±4)	(193±6)	(237±6)
Operating Condition	Indoor or outdoor			
Storage Temperature Range	> 1 month 0~35°C; ≤1 month -20~45°C			
Operating Charging Temperature	0~55 °C			
Discharging Temperature	0~55 °C			
Humidity	15% ~ 85%RH(No condensation)			
Cooling Type	Natural			
IP Rating of Enclosure	IP66			
Installation Method	Stacked installation			
Warranty	10 years (5 free warranty + 5 paid warranty)			

Battery Module Type	DH-LFP-VHV
Total Energy	4.60kWh
Usable Energy*	4.37kWh
Voltage Range	56~72Vd.c
Nominal Voltage	64V
Charging Voltage Declared by Manufacturer	72V
Upper Limit Charging Voltage	73V
Discharge Cut-off Voltage	56V
Lower Limit Discharging Voltage	52V
Max. Continuous Charging Current	30A
Max. Continuous Discharge Current	30A
DOD	95%
Dimension ((L*W*H),mm)	(600±2) * (210±2) * (285±2)
Net Weight	(44±2) kg

Battery Module Type	DH-LFP-VHV							
Operating Condition	Indoor or outdoor							
Operating Charging Temperature	0~55°C							
Discharging Temperature	0~55°C							
Humidity	15% ~ 85%RH(No Condensation)							
Configuration	(10S)2S							
Warranty	10 years (5 free warranty+5 paid warranty)							
PV Input								
Max. DC Input Power (kW)	5	6	7.5	9	12	15	18	22.5
Max. PV Voltage (V)	1000							
Rated DC Input Voltage (V)	620							
DC Input Voltage Range (V)	150-1000							
MPPT Voltage Range (V)	150-850							
Full MPPT Range (V)	200-850							
Start-up Voltage (V)	250-850							
Max. DC Input Current (A)	300-850							
Max. Short Current (A)	500-850							
No. of MPPT Tracker/Strings	160							
Battery Port								
Battery Nominal Voltage (V)	150	200	200	250	300	350	450	500
Battery Voltage Range (V)	80-600							
Max. Charge/Discharge Current (A)	30							
Max. Charge/Discharge Power (kW)	3	4	5	6	8	10	12	15
Charging Curve	3 Stages							
Compatible Battery Type	Li-ion / Sodium-ion battery							
AC Grid								
Nominal AC Output Power (kW)	3	4	5	6	8	10	12	15
Max. AC Input/Output Power (kVA)	4.5/3.3	6/4.4	7.5/5.5	9/6.6	12/8.8	15/11	18/13.2	22.5/16.5
Max. AC Output Current (A)	5.3	7	8.5	10.5	13.5	17	21.5	27
Nominal AC Voltage (V)	230/400							
Nominal AC Frequency (Hz)	50/60							
Power Factor	1 (-0.8-0.8) adjustable							
Current THD (%)	< 3%							
AC Load Output (Back-up)								
Nominal Output Power (VA)	3000	4000	5000	6000	8000	10000	12000	15000
Nominal Output Voltage (V)	230/400							
Nominal Output Frequency (Hz)	50/60							
Nominal Output Current (A)	4.4	5.8	7.3	8.7	11.6	14.5	17.4	21.8
Peak Output Power	3300VA,60s	4400VA,60s	5500VA,60s	6600VA,60s	8800VA,60s	11000VA,60s	13200VA,60s	16500VA,60s
THDV (with linear load)	<3%							
Switching Time (ms)	<10							
Efficiency								
Europe Efficiency								
Max. Efficiency	98.00%							
Battery Charge/Discharge Efficiency	98.00%							
Protection								
Reverse Polarity Protection	Yes							
Over Current / Voltage Protection	Yes							
Anti-islanding Protection	Yes							
AC Short-circuit Protection	Yes							
Leakage Current Detection	Yes							
Ground Fault Monitoring	Yes							
Grid Monitoring	Yes							
Enclosure Protect Level	IP66							
General Data								
Dimensions ((L*W*H),mm)	600 * 432 * 210							
Weight (kg)	25							
Topology	Transformerless							
Cooling Concept	Natural Convection							
Relatively Humidity	0-100%							
Operating Temperature Range (°C)	-25 to 60°C							
Operating Altitude (m)	<4000							
Noise Emission (dB)	<40							
Standby Consumption (W)	<5							
Display & Communication Interfaces	LCD, LED, RS485, CAN, Wi-Fi, GPRS, 4G							
Certification & Approvals	NRS097,G98/G99,EN50549-1,C10/C11,AS4777.2,VDE-AR-N4105,VDE0126, IEC62109-1, IEC62109-2							
EMC	EN61000-6-2,EN61000-6-3							



DHV-122 172
C & I ESS STE-HCI Series



Model	DHV-122	DHV-172
Rated Energy	122.88kWh	172.032kWh
Cell Type	LFP(LiFePO4)	
Pack Capacity	10.24kWh	14.336kWh
Pack Number	12	
Rated Voltage	614.4V	
Working Voltage Range	537.6-700.8V	
Efficiency(@0.5C-rate)	96%	
Max.Charging/Discharging Current	200A	250A
Cycle Times	>6000 times(25°C, 0.5C, 90%DOD,80%EOL)	
Communication	LAN/CAN/RS485	
IP Level	IP20	
Working Temp.Range	0 to 50°C	
Working Humidity Range	5-95 % (No Condensation)	
Max.Altitude	3000m	
Dimension (W*D*H)	1000x560x1800mm	1000x710x1800mm
Weight	<1100kg	<1480Kg
Fire Protection	PACK Level Aerosol	



DHJ5120-J1
Rack-Mounted Residential ESS



Safety
LFP Battery, Intelligent BMS and protective hardware providing complete protection



Expandability
Support parallel connection number up to 10



Accuracy
Dynamic SOC calibration



Durability
6,000 cycles at 90% DOD, 15+ years design life



Compatibility
Suitable for most mainstream inverters



Certificates
UL, CE, IEC62619, UN38.3, MSDS

Model	DHJ5120-J1
Battery Type	LFP
Total Energy	5.22kWh
Usable Energy	4.96kWh
Voltage	51.2V
Cell Capacity	102Ah
Max. Parallel Connection Number	10P
Max. Charging Voltage	57.6V
Nominal Charging Current	50A(single) /110A(multiple in parallel)
Nominal Discharging Current	80A(single)/110A(multiple in parallel)
Discharge Cut-off Voltage	48V
Battery Efficiency	95%
Max. Recommended DOD	95%
Communication	RS485/CAN
IP Rating	IP20
Operating Temperature	-10~50°C
Cooling Type	Natural cooling
Altitude	≤5,000m
Humidity	5%~95%(No condensed water)
Battery Protection	Over-current/Over-voltage/Short-circuit/Under-voltage/Over temperature
Warranty	10 years
Dimension	560*390*131mm
Net Weight	45kg
Case Material	Metal
Color	Black
Installation	Ground Installation



DH-X-HV-460V206AH

High Voltage Stackable Energy Storage System

Smart Control
Advanced BMS with real-time monitoring and remote management
CAN 2.0 communication protocol for transparent data control

Flexible Architecture
4-6 module flexible configuration (54-56kVh capacity range)
Modular design saves installation space

High Efficiency & Reliability
460V high-voltage architecture reduces transmission loss
8,000 cycle life ensures long-term value
Multiple protection mechanisms (overcharge/discharge/current)

Typical Applications
Commercial peak shaving
Premium residential energy independence
PV system energy storage

PDU HV-PDU 1000VDC103A(WIFI)

Operating Voltage	250~1000V
Rated Charge/Discharge Current	120A
Max.Charge/Discharge Current	130A
Operating Temperature Range	-10°C~55°C
Weight	≈28kg
Waterproof Rating	IP20
Dimensions (W x D x H)	558*695*235mm



Module HV-Tower-76.8V206Ah

Battery Type	LiFePO4(LFP)
Rated Voltage	76.8Vdc
Rated Capacity	206Ah
Rated Energy	16kWh
Rated Charge/Discharge Current	120A
Max. Charge/Discharge Current	130A
Operating Temperature Range	-10°C~55°C
Waterproof Rating	IP20
Weight	≈125kg
Dimensions (W x D x H)	559*690*235mm



Model		DH-X-HV- 460V206Ah		
Main Parameter				
Battery Type		LiFePO4		
Module Nominal Energy(kWh)		16		
Mini. Energy of Module (kwh)		15.5		
Module Nominal Voltage (V)		76.8		
Rated Capacity(Ah)		206		
No. of System Module Series Connections (Opfonal)	4	5	6	
Rated Voltage of the System(V)	307.2	384	460.8	
System Working Voltage(V)	268.8-345.6	336-432	403.2-518.4	
System Nominal Energy(kVWh)	64	80	96	
Mini. Discharge Energy of the System (kWh)	60.74	75.93	91.12	
	Rated Current	120		
Charge/Discharge Current (A)	Max. Current	130		
	Overload Current	150(10sec,25°C)		
Status Indicator Light	Blue: Battery system start status, green: Battery system operation status, Red:Battery system fault status			
Communication Protocol		CAN2.0		
Operating Temperature Range (°C)		-10°C - 55°C		
Operating Humidity Range		≤95% (No condensation)		
Operating Altitude		≤2000m		
System Cooling Method		Fan cooling		
Waterproof Rating		IP20		
Installation Place		Indoors		
Net Weight (kg)		≈528-778		
Dimensions (mm)		676*1800*707		
Storage Temperature(°C)		0~35		
Recommended Depth of Discharge (DOD)		90%		
Fire Protection System		Aerosol (optional)		
Cycle Life		≥8000 Cycles (25°C±2°C, 0.5C, 80%DOD@65%EOL)		
Certification		5 Years(Under Warranty Terms)		
Energy Throughput ^[1]		133MWh	166MWh	200MWh
Certification		Cell: UL 1973/IEC62619/CEIROHS/MSDS/UN38.3		

DH-X-HV-716V100AH

High Voltage Stackable Energy Storage System



Product Model HV-PDU 1000VDC100A(WIFI) (A06)

Operating Voltage	250~1000Vdc
Rated Charge/Discharge Current	50A
Max. Charge/Discharge Current	100A
Operating Temperature Range	-10°C~55°C
Waterproof Rating	IP20
Dimension(Wide*Depth*High)	517*745*155mm
Weight	~22kg
Parallel Connection	Support



Product Model HV-Tower-32S100

Battery Type	LiFePO4(LFP)
Rated Voltage	102.4Vdc
Rated Capacity	100Ah
Rated power	10.24kW
Rated Charge/Discharge Current	50A
Max. Charge/Discharge Current	100A
Operating Temperature Range	-10°C~55°C
Waterproof Rating	IP20
Dimensions (W*D*H)	517*745*155mm
Weight	~88kg



Product Model		DH-X-HV-Series				
Main Parameter						
Battery Type		LiFePO4				
Module Power(kWh)		10.24				
Module Nominal Voltage(V)		102.4				
Rated Energy(Ah)		100				
No of System Module Series Connections (Optional)		3	4	5	6	7
System Rated Voltage(V)		307.2	409.6	512	614.4	716.8
System Operation Voltage(V)		268.8-345.6	358.4-460.8	448-576	537.6-691.2	672.2-806.4
System Rated Power(kWh)		30.72	40.96	51.2	61.44	71.68
System Discharge Power(kWh)		29.49	39.32	49.15	58.98	68.81
Charge/Discharge Current (A)	Rated Current	50				
	Max. Current	100				
	Overload Current	115(10sec,25°C)				
Status Indicator Light		Blue: battery system start status, green: battery system running status, red: battery system fault status				
Communication Protocol		CAN2.0				
Working Temperature Range		-10°C- 55°C				
Working Humidity Range		≤95% (No condensation)				
Working Altitude		≤2000m				
System Cooling Method		Fan cooling				
Waterproof Grade		IP20				
Installation Location		Indoor				
Net Weight (kg)		45+90*N(N is the number of modules)				
Max. Size (mm)		765*577*1380				
Storage Temperature		0~35				
Recommended Discharge Depth		90%				
Cycle Life		≤8000 Cycles (25°C+2°C,0.5C,80%DOD@65%EOL)				
Certification		Cell:UL1973/EC62619/UL9540A/TUV/CE/MSDS/UN38.3				
Warranty		5 Years(Under Warranty Terms)				
Energy Throughput		67MWh	89MWh	112MWh	134MWh	156MWh



DH-R100-211-CE



Model	DH-R100-211-CE
Cell Type	LFP-300Ah
Grouping Mode	1P44S*5
Charge/Discharge Rate	0.5P@25°C
Nominal Energy (kWh)	211
Voltage Range(V)	600~803
AC Side	
AC Voltage (V)	400 (-20%~15%)
Rated Power (kW)	100
PCS Maximum Efficiency (%)	98
Total Harmonic Distortion Ratio (%)	<3
System Parameters	
Work Temp Range (°C)	-20~50 (derating required at above 45°C)
Work Humidity Range (%)	5~95
Cooling Mode	Liquid-cooled
Altitude (m)	≤2000 (> 2000 Derated Use)
Maximum System Efficiency (%)	90
System Cycle Life	>8000,0.5c@25°C,90%DOD
Fire Protection System	Aerosol FSS
Ingress Protection	IP55
Communication Port	4G, RS485, Ethernet
Communication Protocol	Modbus/MQTT
Certification	GB/T36276, IEC62619, IEC62477, IEC61000, UN38.3
Dimension (W*D*H)mm	1340*1300*2260
Weight (T)	2.6



DH-ESS-135kW/282kWh-0.48kV
DH-ESS-135kW/289kWh-0.48kV
DH-ESS-75kW/289kWh-0.48kV

System Model	DH-ESS-135kW/282kWh-0.48kV	DH-ESS-135kW/289kWh-0.48kV	DH-ESS-75kW/289kWh-0.48kV
Battery Parameters			
Battery Cell Type	LFP/306Ah	LFP/314Ah	LFP/314Ah
Battery Configuration	1P288S	1P288S	1P288S
Battery Capacity at DC Side (BOL)	282kWh	289kWh	289kWh
Maximum Charging Rate / Nominal	0.5C / 2 Hours	0.5C / 2 Hours	0.26C / 3.85 Hours
Discharge Duration			
Battery Rated Voltage		921V	
Battery Voltage Range		806V~1,000V	
Battery Cooling Method		Liquid Cooling	
AC Parameters			
Rated Power	135kW	135kW	75kW
Rated Voltage		480V±10%	
Rated Frequency		60Hz	
Max. THD of Current		<3% (at nominal power)	
General Parameters			
Topology		Transformerless	
Size(W*H*D)		1,350*2,400*1,350mm (4.43*7.87*4.43 ft)	
Weight		3,000kg	
IP Level		IP54	
Anti-Corrosion		C4 Standard, C5 Optional	
Fire Protection System		Aerosol, Smoke, and Temperature Detector, NFPA 68-Compliant Deflagration Panel, NFPA 69-Compliant Ventilation System with Combustible Gas Detection(Optional).	
Operating Temperature		-30°C~50°C(>45°C derating) / -4°F~122°F (>113°F derating)	
Max. Operating Altitude		3,000m	
Communication Protocol		Modbus TCP/IP	
Communication Interface		RS485 / Ethernet	
Compliance Standard		IEEE1547:2018, UN38.3, FCC part15B	



Compact and Fashionable design

- Latest design can compatible all EVs
- Compact & fashionable design can match all your modern home & business building styles
- High cost-effective & Steady performance



Easy Use

- Support various payment method, such as RFID / credit card / App etc
- With HMI easy operate the EV Charger flexibly, Or with the classic LED display all parameters



Safety and protection

- Comply with the latest leakage protection standard
- Multiple protection to ensure the users safety
- IP55 & IK10



Innovation

- Rail mounting make the installation easily
- Intelligent error diagnosis



High efficiency

- Support high power charging up to 120kW can meet the market main popular EVs charging requirement
- Support dual charging plugs which can charging two EVs at the same time with steady performance



Excellent adaptability

- Compact design takes small space
- With high standard cabinet design can use for indoor & outdoor freely



Intelligent control

- OCA listed brand, comply with the latest OCPP protocol standard
- Intelligent payment solution can support RFID / Credit card / Apps etc
- Intelligent communication solution including Bluetooth / Wifi / Ethernet / 4G



Safety & Protection

- Comply with the latest leakage protection standard
- Multiple protection to ensure the users safety
- IP54 & IK10
- EMC comply with Class B

Model		DH7/11/22kWHL Series		DH7/11/22kWHL Series
For		Europe		North America
Power Input	Input Type	1-Phase	3-Phase	1-Phase
	Input Wiring Scheme	1P+N+PE	3P+N+PE	1P+N+PE
	Rated Voltage	230VAC±10%	380VAC±10%	L1:100VAC±10%/ L2:230VAC±10%
	Rated Current	16A or 32A		
Power Output	Grid Frequency	50Hz or 60Hz		
	Output Voltage	230VAC±10%	380VAC±10%	L1:100VAC±10%/ L2:230VAC±10%
	Maximum Current	16A or 32A		
	Rated Power	7kW	11kW or 22kW	3.5KW/7kW
User Interface	Charge Connector	Type 2/GBT		Type 1 Plug
	Cable Length	5m or Optional		
	LED Indicator	Green/Blue/Red		
	LCD Display	4.3 Inch Touch Color Screen(Optional)		
Communication	RFID Reader	ISO/IEC 14443 RFID Card Reader		
	Start Mode	RFIDCard/PasswordLogin(Optional)		
	Backend	Bluetooth / Wi-Fi /Cellular(Optional) / Ethernet(Optional)		
	Charging protocol	OCPP-1.6J		
Safety and Certification	Energy Metering	Embedded Meter Circuit Component With 1% accuracy		
	Residual Current Device	DC 6mA+Type A AC 30mA		
	Ingress Protection	IP55		
	Impact Protection	IK10		
Environment	Cooling Method	Natural Cooling		
	Electrical Protection	Over/Under Voltage Protection,Over Current Protection, Short Circuit protection, Over/Under Temperature Protection,Lightning Protection,Ground Protection		
	Certification	CE		
	Certification and Conformity	IEC61851-1,IEC62196-1/-2,SAE J1772		
Mechanical	Mounting	Wall-mount/Pole-mount		
	Storage Temperature	-40°C - +85°C		
	Operating Temperature	-30°C - +50°C		
	Max. Operating Humidity	95%, Non-condensing		
Mechanical	Max. Operating Altitude	2000m		
	Product Dimension	348mm*258mm*175mm (L*W*H)		
	Package Dimension	412mm*302mm*252mm (L*W*H)		
	Weight	4kg(Net) / 14kg(Gross)		
	Accessory	Cable Holder,Pedestal(Optional)		

Model		DH120/240kWHL Series		DH120/240kWHL Series
For		Europe		North America
Power Input	Input Type	3-Phase		
	Input Wiring Scheme	3P+N+PE		
	Rated Voltage	380VAC±15%		
	Max. THDi	5%		
Power Output	Min. Power Factor	0.98		
	Grid Frequency	50Hz or 60Hz		
	Output Voltage	250V-1000V DC		
	Maximum Current	200A, 250A(optional)		
User Interface	Rated Power	120-240kW		
	Number of Connectors	1 or 2		
	Charge Connector	CCS2/GBT		CCS Combo 1 Plug
	LED Indicator	Green/Blue/Red,Progress Indicator		
Communication	LCD Display	7 Inch Touch Color Screen		
	RFID Reader	ISO/IEC 14443 RFID Card Reader		
	Start Mode	RFID Card or APP		
	Backend	Ethernet/Cellular, optional: WIFI		
Safety and Certification	Charging Protocol	OCPP-1.6J		
	Energy Metering	Meter With 1% Accuracy		
	Residual Current Device	Yes		
	Internal FUSE	Yes		
Environment	Ingress Protection	IP54		
	Impact Protection	IK10		
	Cooling Method	Fan Cooling		
	Max. Operating Noise Level	65dB		
Mechanical	Electrical Protection	Over/Under Voltage Protection,Over Current Protection, Short Circuit Protection, Over/Under Temperature Protection,Lightning Protection, Ground Protection		
	Certification	CE		
	Certification and Conformity	IEC62196-1/-3,IEC 61851-1/-23/-24		
	Mounting	Free-standing Cabinet		
Mechanical	Storage Temperature	-40°C - +75°C		
	Operating Temperature	-30°C - +55°C		
	Max. Operating Humidity	95%, Non-condensing		
	Max. Operating Altitude	2000m		
Mechanical	Product Dimension	1680mm*700mm*450mm or 1920mm*750mm*750mm(L*W*H)		
	Package Dimension	1850mm*1050mm*685mm or 2120mm*1220mm*1160mm(W*D*H)		
	Weight	208-480kg(Net)/323-523kg(Gross)		



DH400CEAG1

DH480CEAG1

DH500CEAG1

Highlights

- Air-cooling Peak Charging Current of 400A:**
Sustains a 400A current for over 20 minutes, offering an alternative to liquid-cooling superfast charging.
- Dynamic Load Balancing:**
Addresses the issue of insufficient transformer capacity during peak electricity usage, enabling fast response and smart orderly charging.
- Flexible Charging Technology:**
Utilizes fully flexible and star-coupled flexible charging technology, improving utilization rates by over 30%.
- Smart Fault Prediction:**
With an uptime greater than 95%, multi-sensor technology, and big data analysis through the operation and maintenance platform, more than 50% of equipment anomalies can be predicted.
- Liquid-cooling Peak Charging Current of 600A:**
Achieves true 3-minute charging with a range of over 150 kilometers.
- Multiple Charging Modes:**
Supports Plug and Charge, dual-gun simultaneous charging mode, VIP mode, and day-night mode, reducing equipment costs by approximately 10%.
- Remote Operation and Maintenance Platform:**
Features remote OTA and USB-OTA, resolving over 90% of faults remotely.
- Battery Health Smart Algorithm:**
Identifies safety risks in new energy vehicle batteries, ensuring driver safety (available in future upgrades).

Model		DH480CEAG1
AC Input	Input Connection	3P+N+PE
	Input Voltage	400V AC±15%
	Input Frequency	50Hz
	Power Factor	≥0.99
DC Output	THDi	≤5%
	DC Output Power	480kW
	DC Output Voltage	200~1000V
	DC Output Current	CCS2 Liquid cooling plug: 500A(MAX 600A) CCS2 Air cooling plug: 200A, 300A(MAX 400A optional)
Environmental Conditions	Efficiency	≥95% (at nominal output power)
	Temperature Range	-25°C~+50°C
	Altitude	≤2000m
	Humidity	5%-95 % RH non-condensing
Mechanical Specifications	Dimensions (W*D*H)	Charging host : 1400*1000*2100mm Liquid cooling: 600*370*1900 mm Air cooling: 500*320*1800 mm
	Cable Length	Liquid cooling: 3.5m Air cooling: 4m; (5m or 7m optional)
	Protection	IP54 (indoor and outdoor rated)
	Screen Type	15.6" LCD touch screen(7" LCD touch screen optional)
Basic Information	Languages	English for default (others available via software upgrade)
	Cellular Communication	GSM / 4G / LTE
	Communication Protocols	OCPP 1.6J(can be upgraded to OCPP 2.0.1 later)
	User Authentication	APP, RFID card, Credit card (optional)
Standards and Certification	Declaration of Conformity	CE, CB, TR25
	EMC Class	Class A
	Certification Standard	IEC61851-1, IEC61851-23, IEC61851-24, IEC62196, TR25-1, TR25-3
	Communication to the EV	DIN 70121, ISO 15118-2
Safety Function	Over voltage protection, under voltage protection, overload protection, short circuit protection, open circuit protection, leakage protection, grounding protection, over temperature protection, surge protection.	

DAHAI SOLAR PROVIDES SOLUTIONS FOR LOW-CARBON GREEN LIFE

As the largest distributed photovoltaic module supplier and service provider in Shandong Province, Dahai Solar actively responds to the national call for energy conservation and emission reduction. The company always prioritizes environmental protection, advocating new ideas in environmental protection technology while continuing to innovate and develop the new energy industry. It also implements the "carbon peak" policy. The highest development goal of the enterprise is to achieve zero carbon power generation, zero carbon data centers, zero carbon networks, and zero carbon home construction, making a significant contribution to establishing a zero carbon earth.

To adapt to the new normal and demonstrate new achievements, the company will adhere to top-level design, promote pattern innovation, and implement structural adjustments. The development strategy will focus on market operations and cultural support while strengthening research and development in science and technology for independent innovation. It will closely revolve around the advantages of new energy and new material industries, upgrading technical equipment and industrial levels. Besides the development of new energy, the company will also industrialize and integrate information in new emerging industries such as composite materials and chemical sectors. This continuous enhancement of enterprise innovation and sustainable development will lead to better, faster, and more substantial progress. The ultimate goal is to build a comprehensive international competitiveness for the modern enterprise group.

Dahai Group aims to shine in the new era, capitalizing on new policies and seizing new opportunities!



DAHAI SOLAR