



RDC Charger

User manual



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HIQ Components

HIQ Hardware selection table

| component | description | order code | status |
|------------------------------------|---|-------------------------------|-----------|
| HIQ controllers | | | |
| Master controller | 230 VAC, 11 IO, Enocean, 2 × RS232, RS485, IEX2 terminals | MC-230-01 | available |
| | 230 VAC, 11 IO, 2 × RS232, RS485, IEX2 terminals | MC-230-02 | available |
| | 230 VAC, 11 IO, 2 × RS232, isolated RS485, IEX2 terminals | MC-230-04 | request |
| | 24 VDC, 26 IO, 2 × RS232 | MC-24-05 | available |
| | 230 VAC, 14 IO, RS485, 2 Wiegand | MC-230-W | available |
| | 230 VAC, 11 IO, 2 × RS232, RS485, IEX2 terminals, RFM free-programmable radio | MC-230-02-RFM | available |
| IEX Modules DIN rail | | | |
| Light controller | 10 high power relay-controlled outputs | LC-10-IQ | obsolete |
| | | LC-10-IQ mk2 | available |
| | 8 high power relay-controlled outputs | LC-8-IQ | available |
| Light dimmer | 4 channel universal lights dimmer controls up to 4 Eltaco LUD-12 dimmers | LD-P4-IQ | available |
| DALI dimmer | 8 DALI groups dimmer | LD-D8-IQ | available |
| LED stripe dimmer | 4 channel 12/24V constant voltage LED dimmer | LD-V4-IQ | available |
| Blinds controller | 5 blinds position controller | BC-5-IQ | available |
| I/O expansion module, Cybro family | 12 dig inputs, 6 an/dig inputs, 6 dig inputs/outputs | Bi-24 | available |
| | 12 dig inputs, 12 relay 5A outputs | Bio-24R | available |
| | 12 dig inputs, 12 transistor outputs | Bio-24T | available |
| | 12 dig inputs, transistor outputs, 4 fast counter inputs, 6 PWM outputs | Bio-24PWM | available |
| | 10 digital inputs, 10 relay 8A outputs | Bio-20R | available |
| | 4x230V AC inputs, 8 relays 16A (lights) | Bio-8R4 | available |
| | Resistive inputs (RTD), 12xPt100/1000, Ni100/1000 or potentiometer | AiR-12 | available |
| | Voltage inputs, 12x0..10V | AiV-12 | available |
| | Current inputs, 12x0..20mA | AiC-12 | available |
| | Voltage outputs, 12x0..10V | AoV-12 | available |

| component | description | order code | status |
|---------------------------------------|---|-----------------|-----------|
| Card reader interface | 2 channel wiegand (card, QR, ANPR) reader module, 2x output, 4x input | CR-W2 | available |
| Bus coupler | Connection between RJ9 and cable | CAD-BC | available |
| | Connection between RJ9 and cable, 10pcs bulk package | CAD-BC-B | available |
| COM - various software options | Serial communication module RS232 - RS485 | COM | available |
| | Serial communication module IEX - RS232 | COM-232 | available |
| | Serial communication module IEX - RS485 | COM-485 | available |
| Bus extender | Connection between RJ9 and cable, surge protection | CAD-BE-PROT | available |
| IEX Modules field | | | |
| Scene controller | Touch 4 scene controller | SC-4T-IQ | available |
| | 4scene controller, using any brand of push buttons | SC-4S-IQ | available |
| Temperature & Humidity sensors | Temperature sensor | TS | available |
| | Temperature & Humidity sensor | TS-H | available |
| Thermostat | Touch room thermostat | TH-1T-IQ | available |
| | Blind room thermostat | TH-2-IQ | available |
| Touch operator panel with LCD display | 2x20 characters, temperature, humidity, light sensor | OP-8 | available |
| | Wall mounting kit for OP-8 touch panel | OP-8 - WALL KIT | available |
| HVAC controller | 3 speed fan, 2 valves, binary/analog input, temperature input | FC-1-IQ | available |
| | Modulating valve, 2 relay controller, binary analog input | FC-2-IQ | available |
| Switch inputs module, flush mount | 4 switch inputs, 4 switch inputs/LED outputs | SW-W3-IW | available |
| | 4 switch inputs, 4 switch inputs/LED outputs - 10pcs bulk package | SW-W3-IW-B | available |
| I/O expansions module, flush mount | 2 mains sense inputs 2 relay outputs 16A | O2-L-IW | available |
| Wireless extension modules | | | |
| Wireless DALI-to-DALI bridge | DALI wireless bridge, multiple ballasts per bridge | WD-1 | available |
| Wireless Modbus-to-Modbus bridge | Modbus wireless bridge, | WM-1 | available |
| Wireless Modbus relay | Wireless modbus relay | WR-1 | available |
| | Wireless modbus 5 relay, 1 digital input, 1 temperature input | WR-5 | available |
| RS485 modules | | | |

| component | description | order code | status |
|---|--|-------------------------------|-----------|
| Touch HMI | 4 inch touch HMI panel 86mm box black frame | TGP-4A-01-IQ | available |
| | 4 inch touch HMI panel 86mm box black frame, DIN dose 60mm | TGP-4D-01-IQ | available |
| | 4 inch touch HMI panel 86mm box white frame | TGP-4A-02-IQ | request |
| | 4 inch touch HMI panel 86mm box gold frame | TGP-4A-03-IQ | request |
| | 7 inch touch HMI panel 86mm box black frame | TGP-7A-01-IQ | request |
| Power sensor | 1-phase power sensor, DIN rail | PM1-E-D | available |
| | 1-phase power sensor, DIN rail, CT | PM1-E-D-CT | available |
| | 3-phase power sensor, DIN rail | PM3-E-D | available |
| | 3-phase power sensor, DIN rail, CT | PM3-E-D-CT | available |
| | 1-phase split core current transformer,50A | CT1-E-50 | available |
| | 3-phase split core current transformer,50A,100A, 250A, 400A | CT3-E-XX | available |
| Air Quality sensor | Temperature and humidity on wall sensor RS485 | RB-100-TH | available |
| | Temperature, humidity, CO2 on wall sensor RS485 | RB-100-AQ | available |
| Wiegand modules | | | |
| QR or RFID readers | QR code and 125kHz RFID reader, Wiegand 32b | QR-FR-B | available |
| | Card reader, 125kHz RFID, Wiegand, embedded module | CR-MR | available |
| | Card reader, Mifare, Wiegand, embedded module | CR-MM | request |
| IOT Linkers | | | |
| IOT Linker | Used for RDC Charger, HEMS Gateway and Custom Projects. 2 LAN, 1 USB, USB-C Power supply | IOT-L2-2 | available |
| IOT Linker | Used for CybroWebScada, S-RMS and Custom Projects. 3 LAN, 2 USB, USB-C Power supply | IOT-L3-3 | available |
| IOT Linker | Used for BTMS Gateway and some cases when IOT-L3-3 is not enough. 2 LAN, 1 USB, 12V Power supply | IOT-L3-PRO | available |
| Sensors & accessories - connect to I/O | | | |
| Temperature sensor | Plastic 2m wire | ES-P-IQ | available |
| | Metal housing ip 67, 5m wire | ES-B-IQ | available |
| | White housing, terminals | ES-W-OW-WHITE | available |
| | Ivory housing, terminals | ES-W-OW-IVORY | available |
| Presence/Motion sensors | On-wall & on-ceiling PIR sensor with no delay | IR-580-IQ | available |
| | Recessed ceiling PIR sensor, relay output | IR-C6-B | available |

| component | description | order code | status |
|----------------------------------|--|---------------------------|-----------|
| Buttons | 2 mini buttons | CAD-2-BUT | available |
| Push button wires | Wires for connecting switches on SW-W3 / SC-4S-IQ, 20pcs | CAD-SW-IW-B | available |
| Push button illumination | White illumination LEDs for SW-W3 / SC-4S-IQ, 20pcs | CAD-SW-LED-W-B | available |
| Lightness sensor | Indoor lightness sensor, 0...10V output | RHKF-U-IQ | request |
| Universal dimmer module (Eltaco) | Universal 230VAC light dimmer for LD-P4-IQ | LUD12-IQ | request |
| Wind indicator | Wind speed indicator | WSI-IO-1 | request |
| Leakage sensor | Liquid leakage detector with 1m sensor probe | LLD-IO-1 | request |
| Opening sensor | Magnetic door / window opening sensor | MOS-01 | request |
| Opening sensor | Magnetic door / window opening sensor | MOS-02 | request |
| Accessories | | | |
| Bus cable | 2.5cm RJ9 to RJ9 bus cable | CAD-P0-IQ | available |
| | 1m RJ9 to RJ9 bus cable | CAD-P1-IQ | available |
| | 2m RJ9 to RJ9 bus cable | CAD-P2-IQ | available |
| | 3m RJ9 to RJ9 bus cable | CAD-P3-IQ | available |
| Power supply | 24VDC / 1.5 A power supply | PS-30-24 | available |
| | 24VDC / 2.5 A power supply | PS-60-24 | available |
| | 12VDC / 2 A power supply | PS-30-12 | available |
| Electric strike | Electromechanical strike lock | EL-ST | available |

Energy management & Storage

Low voltage system building blocks

Batteries

| Description | Voltage | Ah | Capacity [kWh] | Code | Mounting |
|---------------------------|---------|-----|----------------|------------------------------|----------|
| LiFePO4 LV battery module | 51.2 | 100 | 5.1 | RB 512-100-R | rack |
| LiFePO4 LV battery module | 51.2 | 200 | 10.2 | RB 512-200-R | rack |
| LiFePO4 LV battery module | 51.2 | 200 | 10.2 | RB 512-200-W | wall |
| LiFePO4 LV battery module | 51.2 | 280 | 14.3 | RB 512-280-W | wall |

Hybrid Inverters

| Description | Grid | Battery | Capacity | Code | Mounting |
|-----------------------------|---------|---------|----------|-----------------------------|----------|
| Low voltage hybrid inverter | 3-phase | LV | 10 kVA | LV-10-3P-01 | wall |
| Low voltage hybrid inverter | 3-phase | LV | 12 kVA | LV-12-3P-01 | wall |
| Low voltage hybrid inverter | 1-phase | LV | 8 kVA | LV-08-1P-01 | wall |
| Low voltage hybrid inverter | 1-phase | LV | 12 kVA | LV-12-1P-01 | wall |
| Low voltage hybrid inverter | 1-phase | LV | 16 kVA | LV-16-1P-01 | wall |

PDU

| Description | Grid | Battery | Code | Mounting |
|--------------------|---------|---------|--------------------------|----------|
| DCLV PDU with xEMS | 3-phase | LV | RAC-LV-x | wall |

High voltage system building blocks

Batteries

| Description | Voltage[V] | Capacity [kWh] | Code | Mounting |
|---|------------|----------------|----------------------------|------------------------|
| LiFePO4 HV Freestanding (modular battery) | 153.6 | 7.68 | BA-G3-01-F | Freestanding (modular) |
| LiFePO4 HV Freestanding (modular battery) | 204.8 | 10.24 | BA-G4-01-F | Freestanding (modular) |
| LiFePO4 HV Freestanding (modular battery) | 256 | 12.80 | BA-G5-01-F | Freestanding (modular) |
| LiFePO4 HV Freestanding (modular battery) | 409.6 | 20.48 | BA-G8-01-F | Freestanding (modular) |

Batteries

| Description | Voltage[V] | Ah | Capacity [kWh] | Code | Mounting |
|-------------------------|------------|-----|----------------|-----------------------------------|---------------|
| LiFePO4 HV battery rack | 512 | 100 | 51.2 | RBHV 512-100-RA | standing IP20 |
| LiFePO4 HV battery rack | 512 | 100 | 51.2 | RBHV 512-100-RA-O | standing IP54 |
| LiFePO4 HV battery rack | 665 | 100 | 66.5 | RBHV 665-100-RA | standing IP20 |
| LiFePO4 HV battery rack | 665 | 100 | 66.5 | RBHV 665-100-RA-O | standing IP54 |
| LiFePO4 HV battery rack | 512 | 200 | 102.4 | RBHV 512-200-RA | standing IP20 |

| Description | Voltage[V] | Ah | Capacity [kWh] | Code | Mounting |
|-------------------------|------------|-----|----------------|-----------------------------------|---------------|
| LiFePO4 HV battery rack | 512 | 200 | 102.4 | RBHV 512-200-RA-O | standing IP54 |

Hybrid Inverters

| Description | Grid | Battery | Capacity | Code | Mounting |
|------------------------------|---------|---------|----------|-----------------------------|----------|
| High voltage hybrid inverter | 3-phase | HV | 10 kVA | HV-10-3P-01 | wall |
| High voltage hybrid inverter | 3-phase | HV | 15 kVA | HV-15-3P-01 | wall |
| High voltage hybrid inverter | 3-phase | HV | 20 kVA | HV-20-3P-01 | wall |
| High voltage hybrid inverter | 3-phase | HV | 30 kVA | HV-30-3P-01 | wall |
| High voltage hybrid inverter | 3-phase | HV | 50 kVA | HV-50-3P-01 | wall |

PDU

| Description | Grid | Battery | Code | Mounting |
|--------------------|---------|---------|--------------------------|----------|
| ACHV PDU with xEMS | 3-phase | HV | RAC-HV-x | wall |

eSTORE all in one solution

| Description | Voltage | Power [kW] | Capacity [kWh] | Code | Mounting |
|--------------------------|---------|------------|----------------|----------------------------------|---------------|
| Energy storage with xEMS | 512 | 50 | 102.4 | eSTORE 512-200 | standing IP20 |
| Energy storage with xEMS | 512 | 50 | 102.4 | eSTORE 512-200-O | standing IP54 |
| Energy storage with xEMS | 1330 | 1075 | 1118 | eSTORE 1330-840 | standing IP54 |
| Energy storage with xEMS | 1330 | 1075 | 2236 | eSTORE 1330-1680 | standing IP54 |

PDU

| Description | Grid | Battery | Code | Mounting |
|-----------------------------------|---------|---------|----------|----------|
| ACHVHP PDU (eSTORE), HP batteries | 3-phase | HVHP | RAC-HP-x | wall |