



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

component	description	order code	status
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
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

component	description	order code	status
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			
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
	10 inch touch HMI panel black frame, wall	TGP-10W-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

component	description	order code	status
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
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			

component	description	order code	status
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
	Electromechanical strike lock	99 NF Top 305 24V 100% ED	available
	Electromechanical strike lock	SM99 NF Top 305 24V 100% ED	available
	Electromechanical strike lock	SZ99 NF Top 305 24(424)	available
	Electromechanical strike lock	SF99 NF Top 305 24(424)	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
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

Description	Grid	Battery	Capacity	Code	Mounting
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