

RDC Charger

User manual



Robotina test d.o.o.

OIC-Hrpelje 38 Hrpelje
SI-6240 Kozina
Slovenia

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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
DALI-2 application controller	100mA, autoaddress, no galvanic isolation	LC-DC2	available
DALI-2 application controller	200mA, no autoaddress, galvanic isolation	LC-DC2-ISO	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
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

component	description	order code	status
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
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			

component	description	order code	status
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			
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	available
	Electromechanical strike lock	SM99 NF Top 305	available
	Electromechanical strike lock	SZ99 NF Top 305	available
	Electromechanical strike lock	SF99 NF Top 305	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)

Description	Voltage[V]	Capacity [kWh]	Code	Mounting
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
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

Description	Voltage	Power [kW]	Capacity [kWh]	Code	Mounting
Energy storage with xEMS	512	50	102.4	eSTORE 512-200-0	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