



ICERT 1000 - Secure Battery Charger



ICERT1043-3-024-005-T-009-3



overview

The ICERT 1000 is a high performance battery charger and DC UPS which is built up of modular switched mode rectifiers (SMR) and a high performance control system. Its cutting edge technology provides high efficiency in a compact package. The concept of modular power electronics means that the ICERT 1000 is easily scalable in output, highly reliable (zero downtime) and reduces spare parts inventory.

SMR SLEEP MODE can also be enabled for the SMRs to operate at **maximum efficiency under light load conditions** and **improves its lifespan**. Furthermore, the availability of various industrial communication protocols such as Modbus, DNP3 and SNMP enhances the connectivity of the system.

specifications

- Input (Full Power):
185 - 275 VAC, 1Φ, L-N
320 - 477 VAC, 3Φ, L-L
(Neutral Required)
- Input Frequency: 45 - 66Hz
- DC Output (Nominal):
Low Voltage - 12V, 24V, 32V 48V
High Voltage - 110V, 240V
- Max Output Power: 43.2kW
- Power Factor: > 0.99
- Harmonic Distortion: < 5%
- Efficiency: 92%
- Operating °C: -40 to 70°C
- IP31 or IP43 (with Door Lock)
- Colour: Grey (RAL7035)
- AC Supply Isolator
- Battery Breakers with Automatic Disconnect
- Integrated Batteries - OPTIONAL
- Integrated DC Distribution
- Programmable Alarm Relays
- Dimensions W x D x H:
600 x 600 x 1900 mm

key features

Modularity

System power electronics are modular and fault tolerant. The load WILL NOT be interrupted even in the absence of the controller.

“Hot-Swap” and “Plug & Play”

All modules (including MCSU-4 controller) are field replaceable without tools and reprogramming.

Battery Shelves

Batteries integrated in the same enclosure

Extensive Battery Management

Individual battery monobloc monitoring and temperature compensation.

Integrated Distribution

Integrated AC and DC distribution including battery and load breakers.

Earth Leakage Detection

Enables the display of leakage current on the MCSU-4 controller or remote monitor screen.

Remote Management System

Connectivity via SNMP, Modbus and DNP3 interface.

IP31 or IP43

Industrial enclosure rating suitable for rugged environments.

Rugged Design

Rated for continuous operation from -40°C to +70°C, over a wide AC supply range 85-300VAC.

applications

- Substation Battery Chargers
- Switch Tripping
- Data Center
- Remote Power Supplies
- Photovoltaic Systems

excellence in secure power technology



ICERT 1000 Ordering Guide

ICERTAABB-C-DDD-EEE-F-GGG-H

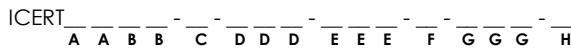
AA - System Type	BB - IP Rating	C - AC Input Phases	DDD - Output Voltage	EEE - Max System Power	F - Cable Entry	GGG - Rectifier Type	H - Battery Shelves
10 - Secure Battery Charger	31 - IP31 43 - IP43	1 - Single Phase 3 - Three Phase	012 - 12V 024 - 24V 032 - 32V 048 - 48V 110 - 110V 240 - 240V	005 - 5kW 014 - 14kW 028 - 28kW 043 - 43kW	B - Bottom T - Top	009 - RT9 011 - RT11 012 - RT12	0 - 0 shelf 1 - 1 shelf 2 - 2 shelves 3 - 3 shelves

Example Systems

Part Number	AA System Type	BB IP	C Input AC	DDD Output V	EEE Max Output kW	F Cable Entry	GGG SMR	H Shelves
ICERT1043-3-110-014-B-012-0	Secure Battery Charger	43	3Φ	110	14	Bottom	RT12	0
ICERT1043-1-024-005-T-009-2	Secure Battery Charger	43	1Φ	24	5	Top	RT9	2
ICERT1031-3-240-043-B-012-0	Secure Battery Charger	31	3Φ	240	43	Bottom	RT12	0

icert part number

Fill in ICERT part number according to format above.



battery options

The battery shelves can hold many battery types and configurations. Please contact RT to confirm your battery requirements.

For 12V monoblocs, each shelf supports a maximum of:

- 4 x 150Ah or
- 3 x 180Ah

dc distribution

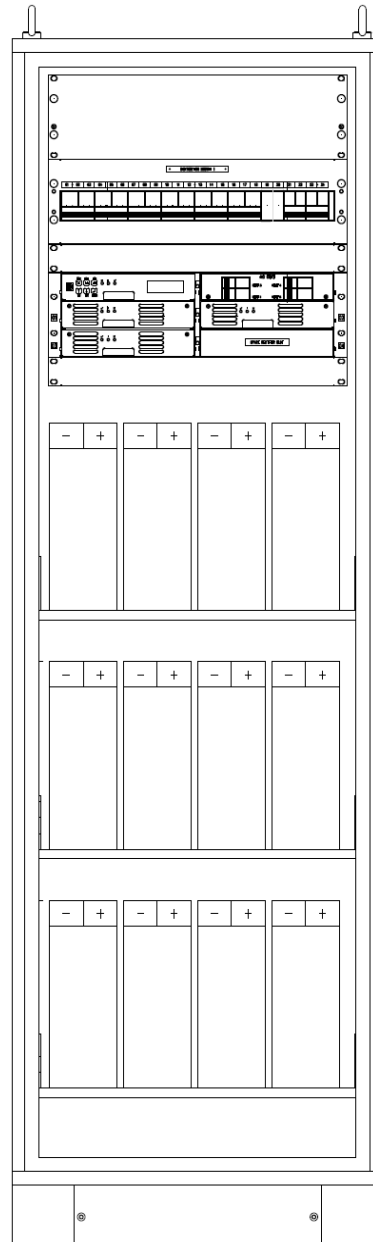
Select your preferred battery options. Please contact RT to confirm number of battery strings.

Number of Battery Strings	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Battery Breakers/Isolators	<input type="checkbox"/> No	<input type="checkbox"/> Yes		
Auto Battery Disconnect	<input type="checkbox"/> No	<input type="checkbox"/> Yes		
Load Breakers	<input type="checkbox"/> No	<input type="checkbox"/> Yes		

optional

Select optional extras to enhance your secure power system.

Communications	<input type="checkbox"/> SNMP	<input type="checkbox"/> Modbus	<input type="checkbox"/> DNP3
Battery Voltage Monitoring	<input type="checkbox"/> No	<input type="checkbox"/> Yes	
AC Mains Monitoring	<input type="checkbox"/> No	<input type="checkbox"/> Yes	
Site Monitoring	<input type="checkbox"/> No	<input type="checkbox"/> Yes	



1. AC TERMINALS ON REAR LEFT SIDE.
2. MUB ON FRONT RIGHT SIDE.
3. COMMS ON REAR RIGHT SIDE.

DISTRIBUTION 1; (BATTERY & LOAD)
SEE SHEET S01 FOR DETAILS

POWERSHELF MAGAZINE;
1. CSU 24VDC x 1
2. RT9-24VDC 1.4KW x 3
3. SPARE SMR SLOT = 1
4. SMR AC DISTRIBUTION
MCB 6KA 1P 16A x 4

BATTERY BANK 5 & 6
BATTERY BANKS SHELF GROUP: 3

BATTERY BANK 3 & 4
BATTERY BANKS SHELF GROUP: 2

BATTERY BANK 1 & 2
BATTERY BANKS SHELF GROUP: 1

PLINTH 100MM