

Switch mode rectifier modules convert power from an AC supply into smooth DC and are normally used in conjunction with a battery to provide an uninterruptable DC power system.

These systems are available in a variety of different scalable outputs depending on customer requirements. The small dimensions of the rectifiers allow for high power density in 300, 400 or 600mm deep 19-inch or 23-inch racks.



DC Output

The rectifier units come in a wide selection of DC Output Voltages.

12V	24V	32V	48V
110V	120V	240V	400V

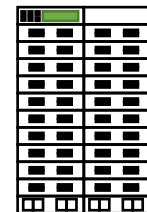


Scalability

The rectifier units are configurable and will depend on what individual requirements.



6U



12U

Industries



Substations



Electroplating



Industrial



Telecom



PAGA



Applications

- Switch tripping chargers
- Remote power supplies
- Substation battery chargers
- Photovoltaic systems
- Data centre servers



Low MTTR

Rectifier and controller modules are 'hot-pluggable' offering users a system with low mean time to repair (MTTR). The modules can be replaced on a live system without load interruption.



Automatic Battery Discharge Test

Monitor battery life with software-controlled battery discharge tests (BDT). The BDT can be used to confirm the capacity of the battery by performing a periodic, controlled battery discharge test under normal system load without disconnection.

Specifications

INPUT	VALUE
Input Voltage	230VAC nominal Single phase (range 85-275VAC) (320-477VAC 3Ph +N option available) *380VAC nominal 3Ph (range 323-480VAC) for RT15
Power Factor	>0.99 for 100% output power
Frequency	45-66Hz
Harmonic Distortion	<5%
OUTPUT	VALUE
Voltage Range (VDC)	12, 24, 32, 48, 120, 240, 400
Power (kW)	Up to 2.4kW (per module) Up to 30kW per RT15 Module Reduced to 55% of rated output at 110VAC nominal
Efficiency	>95% typical from 50% to 100% output power
Load Sharing	Better than $\pm 5\%$ of full scale with active current sharing
SYSTEM	VALUE
Operating Temperature	-40°C to +70°C
Optional Features	- Battery Cell Monitoring (BCM) - Battery Discharge Test (BDT) - Low Voltage Disconnect (LVD) - Remote Management System
Standard Compliance	Designed to UL60950 (2005), IEC60950 (2005), ETSI 300019

Requirements Guide

AC Input Voltage

- ☐ 230VAC nominal
 ☐ 3Ph +N (Neutral required)

System output required

*PM = Power module

SYSTEM VOLTAGE	PM MODEL	6U MAX NO. OF PM - 10	12U MAX NO. OF PM - 20	7U MAX NO. OF PM - 2	19U MAX NO. OF PM - 6
12V	RT9	☐ 9kW	☐ 18kW		
24V	RT9	☐ 14kW	☐ 28kW		
32V	RT9	☐ 12kW	☐ 24kW		
32V	RT10	☐ 16kW	☐ 32kW		
48V	RT11	☐ 24kW	☐ 48kW		
120V	RT12	☐ 24kW	☐ 48kW		
240V	RT12	☐ 24kW	☐ 48kW		
240V	RT15			☐ 58kW	☐ 174kW
400V	RT15			☐ 240kW	☐ 600kW

* Other configurations available on request

Outputs Required

- ☐ Load MCB
 ☐ Battery MCB
 ☐ Custom MCB

Remote Connectivity

- ☐ SNMP
 ☐ TCP/IP

Temperature Sensors

- ☐ Battery Temperature Sensor
 ☐ Ambient Temperature Sensor

Optional Features (You may select more than one)

- ☐ WebCSU (SNMP)
 ☐ Battery Cell Monitoring
☐ Site Monitor Modules
 ☐ Mains Monitor Interface Board

* Tick all options required

