

X1000-48

Maxi Power System

The ultimate in large scale Telecom power solutions, Gravitas Energy Systems X1000-48 is a fully scaleable system built in standard 600 x 600 x 2200 enclosures with a total of 1000A rectifier capacity..

The power enclosure houses up to 20 RANGER RRS48/50 48V/50A rectifiers with individual AC circuit breakers and power system controller. Bulk DC output is provided on dual A and B feeds through circuit breakers or optional fuses.

The power cabinet also houses auxiliary circuit breakers with capacity for up to 32 circuits.

A modular construction technique allows configuration of circuits with and without alarms and also enables individual systems to be tailored for top or bottom cable entry.

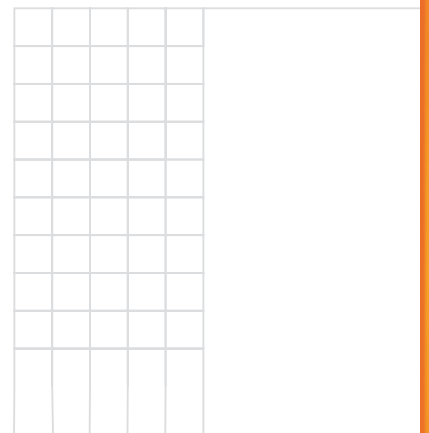
The battery cabinet is designed to accommodate up to 5 strings of Yuasa PL150-12 (or equivalent) front connect batteries..



FEATURES

- **2.2m Free-Standing Cabinet**
- **Hot-Swap Rectifiers**
- **3 Phase AC Input**
- **Intelligent Microprocessor Digital Controller**
- **Dual Bulk A/B DC feed**
- **32 auxiliary load circuits**
- **Optional Battery cabinet**

Gravitas Energy Systems X1000-48 with 1000A rectifier capacity, dual A/B bulk DC and 32 aux. DC load circuit.



SPECIFICATION

Enclosures

The Gravitas Energy Systems X1000-48 is a fully modular 2.2m high, 600mm x 600mm freestanding cabinet incorporating up to 20 rectifiers, AC input protection, LVD and system controller. DC outputs are supplied as dual bulk A/B feeds via circuit breakers or fuses. Up to 32 auxiliary DC feeds of 63A or less capacity are also available.

The battery enclosure houses up to 5 strings of Yuasa PL150-12 (or equivalent) front connect batteries along with individual circuit breakers for each string. This allows for easy upgrade of battery capacity or maintenance without the need to shut down the system.

Rectifier Modules

The Gravitas Energy Systems X1000-48 accommodates high density RANGER series RRS48/50 rectifier modules with 48V nominal DC output and nominal 230V AC input.

Hot-Swap N+1 redundancy is a standard feature of these rectifiers, providing a high level of system security and ease of maintenance.

RRS48/50 rectifiers are set at 54.4V and provide up to 50A.

Maximum rectifier capacity is 1000A with the facility to operate with N+1 redundancy.

DC Distribution & Protection

The Gravitas Energy Systems X1000-48 provides for up to 2 bulk A/B DC feeds through circuit breakers or fuses. In addition up to 32 auxiliary DC load circuits may be installed. An innovative busbar system allows breakers to be configured in groups of 3, 4 or 6 right up to 63A each with or without alarms, providing significant flexibility of configuration. An LVD is incorporated as standard, providing protection against battery deep discharge during an AC supply outage.

Control & Monitoring

The Gravitas Energy Systems X1000-48 incorporates a PCM1000 Intelligent Digital System Control Module providing battery equalisation and temperature compensation, battery event log, displays of rectifier alarms and alarm history log.

A modem or TCP/IP Ethernet LAN adaptor may be included to allow automatic dialing to remote locations for fault reporting. Windows® based software allows either local or remote control of the system from a computer.

Expandability

The Gravitas Energy Systems X1000-48 system is designed round a highly flexible module scheme which allows an almost infinite number of configurations for your energy needs. Powercabinets may be configured to accommodate up to 20 RANGER rectifiers and these may in turn be installed in a parallel configuration with any number of associated battery cabinets.

AC Input

Voltage Range	187-275VAC, 3-phase
Frequency Range	45-65 Hz
Power Factor	>0.98
Input Protection	Individual Rectifier Fusing
AC MCB	Individual Rectifiers

DC Output

Voltage Factory Setpoint	54.4V
Voltage Range	47-57V
Maximum System Current	1000A (800A on bulk feeds)
Rectifier Unit Capacity	50A
Remote Output Adjustment	Via PCM1000 Controller

Environment

Ambient Temperature	0°C to 50°C
Humidity	<95% Non-Condensing
Cooling	Forced cooling integral to rectifier modules

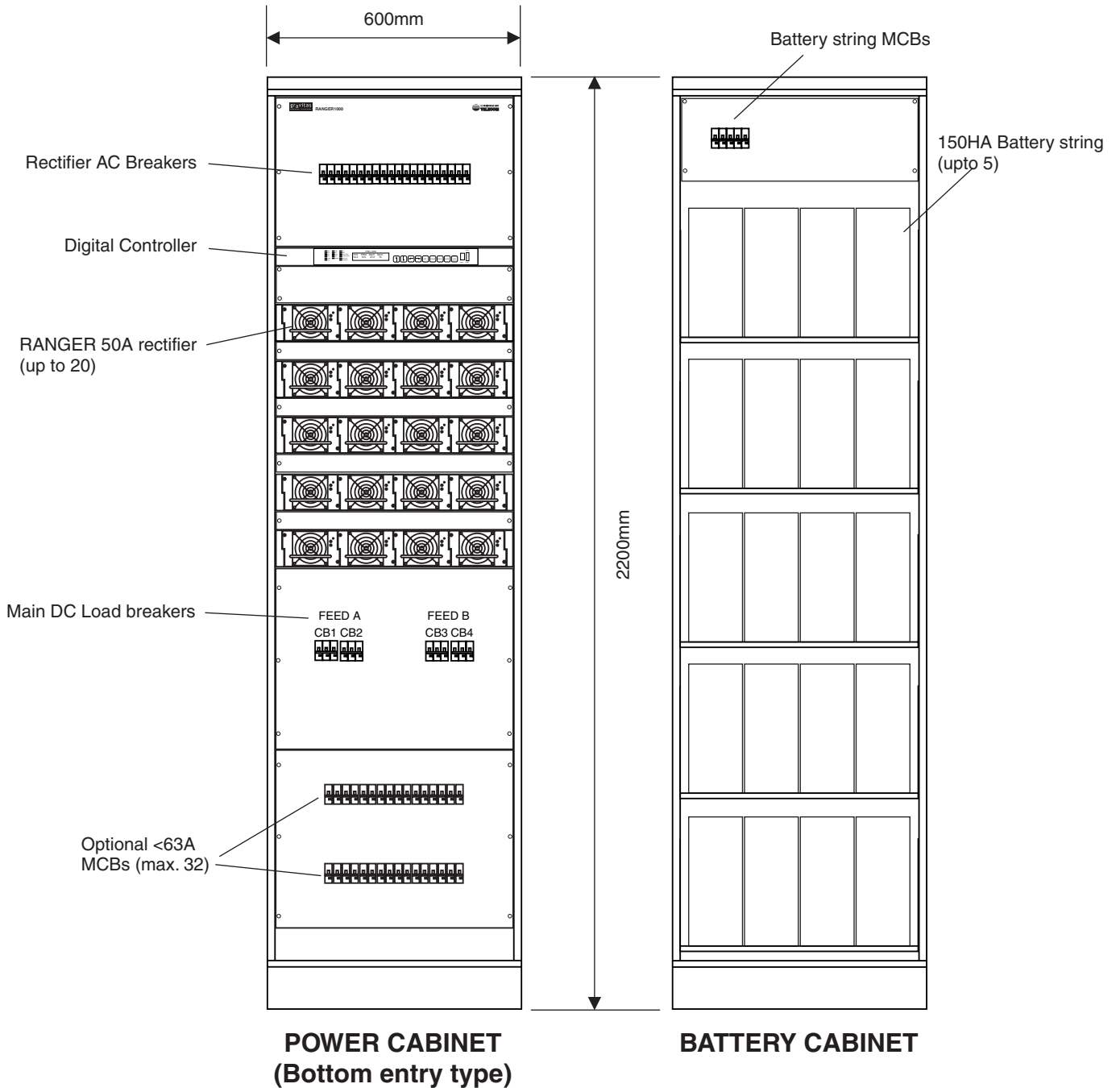
Regulatory

Safety	EN60-950, CE Marked (LVD73/23/EEC) UL1950, CSA22.2-950
Emissions	
Line Conducted	EN55022 level A
Radiated	EN55022 level A
AC Harmonics	EN61000-3-2 class A
Immunity	
Fast Transients	EN61000-4-4 level 3
Surges	EN61000-4-5 level 2 (L-L), level 3 (L-E)
Radio Frequency	EN61000-4-3 level 2
Electrostatic Discharge	EN61000-4-2 level 2 (air discharge)

Mechanical

Size
 Mounting
 Interconnection

2200mm (h) x 600mm (w) x 600mm (d)
 Floor Standing
 Stop or Bottom



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