Minipack System

Power Supply Systems 48V, 3.2 or 4.8kW

Minipack 4.8kW System, 6 rectifiers

Minipack 3.2kW System, 4 rectifiers

Compact and cost effective power supply system

The Minipack system has been specifically designed to meet any requirement in terms of power functionality and cost. Realization of Minipack systems is possible by fitting up to 4 or 6 rectifiers across 2U 19″ shelf including controller and distribution.

Applications

Wireless, fiber and fixed line communication

Today's communications demand state of the art, cost efficient and compact DC power systems. Minipack delivers power density of 14W/in^3 and superb reliability at lowest lifetime cost.

Broadband and network access

Increasing network speed demands flexible and expandable DC power solutions. Minipack is your key building block for future needs.

Product Description

The Minipack system is a compact power system containing a Monitoring and Control Unit (Smartpack), LVD, battery and load MCBs. Switch mode technology with resonant topology and high switching frequency is used to minimize volume and weight and to obtain high reliability. The system accepts large variations on the input voltage (85-300 VAC) and draws sinusoidal current with a soft start power-up.

Key Features

Highest efficiency in minimum space

Resonant topology makes the module efficiency industry leading and contributes to the rectifier's ultra compact dimensions.

Digital controllers

Controller is digitalized, enabling excellent monitoring and regulation characteristics. Thus, the number of component has been reduced by 40% - for highly reliable, long life, trouble free DC power systems.

Heat management

Front-to-back air flow with chassis-integrated heat sinks gives the module the most suitable working environment and no limitations in the scalability of the desired system solution.

Unique connection

A true plug-and-play connection system: time-to-install and cost-reducing solution.

Global approvals

Minipack is CE marked, UL recognized for worldwide installation.

Minipack PS Systems — 48V, 3.2kW or 4.8kW

Additional Technical Specifications

AC Input

Voltage	4 pos: 2 x AC feeds (230VAC 1 ph) 6 pos: 3 x AC feeds (230VAC 1 ph)
Frequency	45 to 66Hz
Maximum Current	See Minipack datasheet
Input Protection	o Surge protection o Internal fuses (L & N)

Monitoring

Monitoring Unit	See Smartpack datasheet
Local Operation	Menu driven software via keypads and LCD or PC (PowerSuite)
Remote Operation	PowerSuite via modem or Monitoring via WebPower (WEB Interface, SNMP protocol and email)
Alarm Relays	6 relays
Visual Indications	o Green LED – System ON o Yellow LED – Minor alarm(s) o Red LED – Major alarm(s) o LCD – system status
Digital Inputs	o 6 (for monitoring of external equipment)
Current Measurements	o Battery current o Rectifier current

Alarms	o Load fuse alarm
	o Battery fuse alarm
	o LVD operated
	o Low output voltage alarms
	    (2 individual alarm levels)
	o High output voltage alarms
	    (2 individual alarm levels)
	o Battery capacity
	o Temperature alarm
	o Symmetry alarm
	o and more

DC Output

Voltage	48VDC
Power	4 pos: 3.2kW (66.7A at 48VDC) 6 pos: 4.8kW (100A at 48VDC)

DC Distribution Options

No. of Load breakers	o 4 pos: Up to 10 mini MCB type (2-30A) o 6 pos: Up to 8 mini MCB type (2-30A)
No. of Battery fuses	o 4 pos: Up to 4 MCB type (60A) o 6 pos: Up to 2 MCB type (100A)
Programmable LVD	o LVBD: 125A o Optional LVLD: 80A o 4 pos: Connection options in blocks of 2 breakers (2-8, 4-6, 6-4 or 8-2) o 6 pos: Connection options in blocks of 2 breakers (2-6, 4-4 or 6-2)

Connections

Battery connections	Screw terminals (up to 35mm2 lug)
Load MCB connections	Terminal blocks (up to 4 mm2)
Alarm connections	Terminal blocks (up to 1.5 mm2)
System	Extractable from frame for easy access

Other Specifications

Isolation	o 3.0 KVAC – input and output o 1.5 KVAC – input earth o 0.5 KVDC – output earth
Operating temp.	-40 to +75°C (-40 to +167°F)
Storage temp.	-40 to +80°C (-40 to +176°F)
Dimensions	19″ mounting (446mm + brackets) 2U height and 250mm depth Recommended cabinet depth is min 300mm
Weight (excl. rectifiers)	4 pos: Approx. 4.38kg (9.66lbs) 6 pos: Approx. 4.28kg (9.44lbs)

Applicable Standards

Electrical safety	IEC 60950-1 UL 60950-1
EMC	o ETSI EN 300 386 V.1.3.2 (telecommunication network) o EN 61000-6-1 (immunity, light industry) o EN 61000-6-2 (immunity, industry) o EN 61000-6-3 (emission, light industry) o EN 61000-6-4 (emission, industry)
Environment	ETSI EN 300 019-2 ETSI EN 300 132-2

Specifications are subject to change without notice

Ordering Information

Part no.	Description
CTOM0402.xxx	Minipack 4 pos – Sales configured system (CTO)
CTOM0602.xxx	Minipack 6 pos – Sales configured system (CTO)