

5U MAXI COMPACT SERIES DC POWER SOLUTIONS



Enatel's high voltage industrial power systems with power output of up to 12.0kW and a maximum current of 109A are the ideal battery charging solution for utility protection and control equipment.

These compact systems are configured using Enatel's state of the art high frequency switch mode rectifier modules and intelligent network capable controllers. They include built-in load and battery distribution, AC input isolation and surge suppression all in a 5U 19" rack mountable power shelf and can be customized and configured to individual customer requirements.

If you require any further information on Enatel's all new range of high voltage ultra compact solutions contact us today.

- **World leading power density.**
- **Fully featured industrial standard rectifiers.**
- **Network monitoring available.**
- **Earth leakage detection.**
- **Built-in AC surge suppression.**
- **Hot swappable rectifiers for no break operation under load.**
- **Easily customized and configured to suit each customers individual needs.**
- **Modular 19" design for ease of installation.**



SPECIFICATIONS

Enatel Ltd
66 Treffers Road
Christchurch 8042
New Zealand

Tel +64-3-366 4550
Fax +64-3-366 0884
Email sales@enatel.net
www.enatel.net



ELECTRICAL

AC Input:Three phase or single phase 90 – 300V AC.
Efficiency:>92% (>45% output power)
Maximum Input Current:76A
Protection:
Input Voltage:.....Auto shutdown, auto restart when
.....correct voltage restored.
Input Inrush:<2x maximum input current.
Frequency Range:45-66Hz
Power Factor:>0.99 (full load)
DC Output:
Output Ratings:
Constant Current:80-110V DC (27.3A)
Constant Power:110-155VDC (3.0kW)
Nominal Voltage:.....120V
Voltage Range:.....80-155V
Maximum Current:109.2A (27.3A per module)
DC Distribution:
Load:3x 63A 2 pole load MCB (breaks +ve & -ve).
Battery:.....1x 125A 2 pole battery MCB (breaks +ve & -ve).
Breaker Fail Detection:.....Auxiliaries on both load and battery breakers.
Earth Leakage Detection:.....Configurable via software, factory set at 25mA.
Regulation:
Line:±0.1%
Load:±0.5% (no load to full load)
Hold-up Time:.....>15ms for 20% output voltage drop.
Start-up Time:Start up delay 1 second
.....(varies with AC supply voltage).
.....Walk-in delay 6 seconds at full output
.....(varies with DC output voltage).
Protection:
Current Limit:Adjustable to 50-100% of maximum rated current.
Over Temperature:Automatic current turndown,
.....backup shutdown protection.
Polarity Reversal:Output fuse with crowbar diode.
Over voltage:.....Adjustable limit.
Isolation:
Input to Output:.....4000V DC
Input to Chassis:3500V DC (VDR to chassis removed)
Output to Chassis:2100V DC

ENVIRONMENTAL REQUIREMENTS

Ambient Temperature:
Nominal:.....25+/-5°C
Range:.....-10°C to +70°C
.....(maximum output power is derated above +50°C)
Storage Temperature:-20°C to +70°C
Humidity:5-95% RH (non-condensing)
Altitude:<2500m, de-rate maximum ambient temperature
.....by 4°C per 1000m above sea level.

MECHANICAL

Dimensions, W, H, D:482.6mm, 222.2mm (5U), 320mm
Weight:9kg (excluding rectifier modules)
Shipping Dimensions:.....540mm, 350mm, 435mm
Shipping Weight:11.5kg (excluding rectifier modules)

MONITORING & CONTROL

Interface:
Display:4 line x 16 character multi-lingual
.....alpha numeric display.
Communications:
Serial:1x USB port on front panel for local PC interface.
Relay:3x alarm and control relays, two of which can be
.....mapped for customized alarm settings.
TCP/IP:.....Ethernet interface for communication
.....using SNMP protocol and internal
.....web based configurator (optional).
Indicators:
3x LED's.....Green - power on/monitor OK.
.....Yellow - non urgent alarm.
.....Red - urgent alarm.
Audible:90dBA buzzer mappable to user defined conditions.
Controls:3x push buttons for parameter
.....setting or viewing on front panel.
Signal Inputs:.....Serial bus for rectifier control and
.....interface to peripheral modules.
.....Fuse fail.
.....5x spare digital inputs.
.....2x temperature sensors (one fitted).
.....3x current shunts (one fitted).
.....2x DC voltage inputs.
Alarms:3x alarm relays.
Alarm Contacts:.....0.3A 100V volts free changeover contacts or
.....0.15A 160V volts free changeover contacts.
Logging Capacity:
Periodic Log:.....16384 records
.....(dependant on number of parameters logged).
Event Log:.....16384 records
.....(dependant on number of parameters logged).
Connections:Relay outputs, mini combicon to accept 1.5mm
.....csa wire. Serial communications to rectifier shelf
.....& peripheral devices - RJ45. USB port - USB mini B.

COMPLIANCES

Safety:EN60950
Electrostatic Discharge:CISPR24
Radiated Radio Frequency:.....CISPR22
AC Harmonics:EN61000-3-2
AC Flicker and Fluctuation:EN61000-3-3
Other:.....CE & RoHS compliant.

