

Product DataSheet:

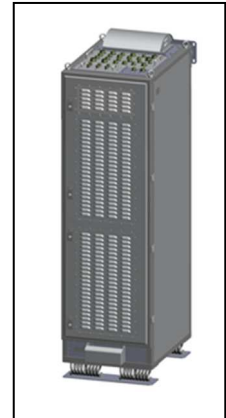
PSD RU – Power Supply & Distribution Rack Unit

Description:

The Power & Distribution Rack Unit is rugged military grade housing 19" standard system able to supply, cooling and interfacing up to twelve internal unit.

Fully qualified MIL-STD-810G and MIL-STD-461F the PSD RU is suitable for applications that require clean and reliable ac power in military environment (Naval Sheltered).

REACH, ROHS and CE marking compliance.



Key Specifications:

- Rugged military grade rack unit (standard 19")
- 3ph 115Vac 50/60Hz input voltage (STANAG 1008 Ed.9 compliance)
- Twelve single phase 115Vac 60Hz internal power supplies (internal frequency converter) decoupled and stabilized respect the input power supply
- Two DC internal power supplies also available
- Programmable thresholds for inrush time and over current for each AC and DC internal power supplies
- External interface with 98 LVDS and 35 LVCMOS signals by D38999 connectors
- Operative temperature range [-5 ÷ +55]°C with warning and alarm programmable thresholds
- Telescopic guides for customer units installation with integrated cables handling system
- Isolation system for mechanical stress at the base and on the upper-rear side of rack
- Fully qualified MIL-STD-810G and MIL-STD-461F
- REACH, ROHS and CE marking compliance
- Dimensions (h x l x d) 2150x600x800mm
- Weight 270 kg

INPUT POWER

105÷125Vrms 50 or 60Hz
25Arms max
5KVA max

INPUT TRANSIENT

<2sec to 89Vrms or 141Vrms

INPUT HARMONIC DISTORSION

THD < 7,5%
SHD < 5%

INPUT PROTECTION

Varistors
Breaker

ISOLATION

1500Vdc input to chassis
1000Vdc internal power supplies
200Vdc signal to chassis

STANDARD

Compliant to STANAG 1008 ed.9

EMI

Compliant to MIL-STD-461F:
CE101, CE102, RE101, RE102
CS101, CS106, CS114, CS116,
RS101, RS103

INPUT/OUTPUT SIGNALS

98 lines LVDS
35 lines LVCMOS
1 line Ethernet
1 line open/close contact
3 line 24Vdc alarm signals
9 line 3GHz RF signals

INTERNAL HOUSING

Twelve 19" standard units (25U)
One non standard unit

INTERNAL POWER SUPPLY

Twelve 115Vrms 60Hz 10Arms
One 12Vdc 150W
One 24Vdc 150W

INTERNAL POWER DISSIPATION

<2500W to have $T_i < 40^\circ\text{C}$

OPERATING TEMPERATURE

[-5 ÷ +55] °C at full power

COOLING

Forced air by FAN UNIT

ENVIRONMENT PROTECTION

Full ruggedizing
Conformal coating

SHOCK & VIBRATION

MIL-STD-810G:
Half sine 30g 6ms over three axis
4÷14Hz 0,25mm 14÷100Hz 0,2g

HUMIDITY

MIL-STD-810G method 507.6

SALT FOG

MIL-STD-810G method 509.6

MTBF

16.595h MIL-217F
Naval Sheltered at 20°C

INDICATORS

Power presence
System status
Internal power supply status

CONNECTOR

D38999 standard
3xTNC type, 9xN type for RF signal

DIMENSIONS (h x l x d)

2150x600x800mm

WEIGHT

270 Kg

COMPLIANCE

REACH, ROHS and CE marking