55 Watt 1GB Indoor Power Over Ethernet Injector Model CPU55A-270

The CPU55A-270 is a 1GB P.O.E (Power Over Ethernet) Injector , combined data and power adapter that interfaces to the customer's wireless modem and other Link and Network outdoor products. The unit provides an RJ-45 input connector, that is connected to
1 GB transformers for connection to an IEEE 802.3 (1 GB) compatible device.
The unit receives power from 100V to 240V using an industry standard IEC320C14 connector. An output RJ45 connector provides the 1GB data and 55V or other voltages for connection to the wireless modem ,use of all 8 pins to carry the Data and the power to the Radio terminal.

Main Features

- Option for easy installation on wall
- Compact size – 160 x 63 x 32 mm
- High efficiency – free convection cooling
- Wide-range input voltage covering worldwide requirements
- Full output protection OCP. SC. OVP
- Meets FCC 15 & EN55022 class B requirements
- Operating temperature range -20° C to +45° C with no derating
- CE, FCC,CB,TUV(US) ,PSE approved

Typical Applications

- Power Over Ethernet
- Fast data modems
- Wireless modems
- 1 GB systems
- Video / Data / Voice modems

Main Specifications
Input

- 90 to 265VAC (wide range)
- Input frequency 47 – 63Hz
- Input inrush current 50A@ cold start
- Input reflected ripple per FCC part 15 & EN55022 class B
- Input cable 3 poles , IEC320C14

Output

- Output voltage: 55VDC or 48VDC
- Output current: 0 – 1 A
- Efficiency: 85% minimum
- Voltage regulation - ±2% Max. For load and line variation
- Temperature coefficient – 0.05% / C max
- Voltage set point – Internal trim-pot ±5%
- Hold-up time – 10 m Sec minimum at full load including 100V input
- Isolation – input/output, input/case >3000VAC
- Protection – output protected against overload, short-circuit and over voltage
- Surge protection – on DC and data lines

Environmental

- Operation temperature range -20°C to +55°C
- Storage temperature range -45°C to +85°C
- EMI / RFI – Meets EN55022 class B requirements & IEC-1000 requirements.
- MTBF – Higher than 200,000 hour

Safety & EMC

- **Safety referring Standards:**
  - UL/CUL UL1950-1 Second Edition
  - CE EN 60950-1 Second Edition
  - AS/NZS AS/NZS 3260

- **EMC referring Standards:**
  - ETSI EN 301 489-1 V1.4.1 (2002-08)
  - ETSI EN 301 489-4 V1.3.1 (2002-08)
  - ETSI EN 301 489-17 V1.2.1 (2002-08)

- **Emission**
  - FCC Part 15, class B.
  - CE (Radiated & Conducted Emission) EN55022 Class B
  - Harmonic EN61000-3-2
  - Voltage Fluctuation EN61000-3-3
  - VCCI Level 2
  - AS/NZS AS/NZS 3548

- **Immunity**
  - **ESD** EN61000-4-2
  - **Radiated Immunity** EN61000-4-3
  - **EFT** EN61000-4-4
  - **Surges** EN61000-4-5 Class 3
  - **Voltage tips, short interruption** EN61000-4-11

Mechanical

- Size – 160 L x 63 W x 32 H mm
- Weight – 200gr. Max
- Cooling – free convection
- Input AC – 3 pin AC inlet IEC320C14 (cable not included)

Reliability

- **MTBF**
  200,000 Power On Hours at 55W load and 45°C environment, computed according to MIL-HDBK-217F, Ground Fixed conditions, using the parts stress method

- **Burn-In**
  100% Burn-In with 80-100% load & 45°C environment temperature for 8 hours minimum

Outputs Connection

RADIO-RJ-45

Pin 1, Data , -55V
Pin 2, Data , -55V
Pin 3, Data , +55V
Pin 4, Data , +55V
Pin 5, Data , +55V
Pin 6, Data , +55V
Pin 7, Data , - 55V
Pin 8, Data , - 55V

Ethernet RJ-45

Pin 1, Data
Pin 2, Data
Pin 3, Data
Pin 4, Data
Pin 5, Data
Pin 6, Data
Pin 7, Data
Pin 8, Data

Output 1: 55V/0.5A
Pin 1,2 Return
Pin 3,6 +55V

Output 2: 55V/0.5A
Pin 4,5 +55V
Pin 7,8 Return

Warranty

Two (2) years manufacture's warranty