Power

FlexNet™ FMPS
150W Multipurpose Power Supply

FlexNet FMPS

- 150W Fiber-to-the-premise UPS for multiple dwelling, multiple tenant and small business unit applications

- Supports one or two MDU/SBU ONTs located up to 100ft from FMPS

- Battery management functionality performs periodic battery capacity testing and status reporting to the ONT and customer

- Built-in battery heater provides extended runtime for applications in cold winter conditions

- Hybrid 16AWG and alarm cable minimizes installation labor

- Status indicators and audible alarm provide local status

- Options for dry contact and PacketCable™ compliant telemetry connections to ONT and MTA

Alpha extends its family of FTTx powering solutions to include the FTTx Multipurpose Power Supply (FMPS) supporting MDU, MTU and SBU ONT products. The FMPS is an intelligent microprocessor controlled 48Vdc UPS system. The input is powered from either a customer owned 90 to 320Vac power outlet or a hard-wired AC connection. System includes one or two parallel outputs and alarm connections, supporting distances of up to 100 ft between the FMPS and ONT, allowing the FMPS to be located close to existing power outlets. Individually monitored 48Vdc strings of standard 7Ah to 8Ah VRLA batteries provide standby power. Built-in battery heater supports extended runtimes at -40°C. LED indicators and an audible alarm provide local visual status, and PacketCable and dry contact compliant telemetry connections to the ONT or MTA.

alpha TECHNOLOGIES™

FlexNet FMPS Multipurpose Power Supply

P/N: 010-592-20-050 FlexNet FMPS, 120V Line cord, 150W, 48Vdc out, -40°C (-40°F)
P/N: 010-592-20-053 FlexNet FMPS, FTTX Multipurpose PS, 120V line cord, -40°C (-40°F)

Electrical

AC input voltage:...............90 to 320Vac
AC input frequency:...........45 to 66Hz
Surge protection: ....ANSI/IEEE Std. C62.41 to Category A, B, or C requirements, using a "Ring Wave" or "Combination" waveform, at a level of 6kV

Operational
  Output power:................150W continuous - 170W, 10 sec max.
Output voltage:..................48 to 58Vdc w/AC power
42 to 58Vdc with battery
Output current:..................3.1A typical (crowbar limited beyond 5A DC)

Output power loading:.......Following GR-909 telephone lines in various states, e.g., ringing, off-hook, on-hook, data, and video operation requirements.
Ripple:...............................Less than 3mVrms
Noise:................................Less than 100mVp-p
Output connection: ....Two terminal blocks accepting 16AWG, parallel connections

Performance / Features

Battery:..............................Four or eight 7.2Ah or 8Ah valve regulated lead acid (VRLA) (batteries sold separately)

Mechanical

⋗ FMPS
Dimensions:
  in:....................................14W x 23.75H x 5.5D
  cm:..................................35.6W x 60.3H x 14D
Weight: 11.3kg (25lbs)

⋗ FMPS + shipping carton
Dimensions:
  in:....................................17W x 28.5H x 11.75D
  cm:..................................35.6W x 60.3H x 14D
Weight: 13.6kg (30lbs)

FMPS with cover removed and two 7.2Ah battery strings installed

Environmental

Operating:
  Temperature: ....-40 to 46°C (-40 to 115°F) plus solar loading
  Humidity: ....0 to 95% RH non-condensing
  Elevation: ....0 to 10000ft (0 to 3000m) elevation
Storage:
  Temperature: ....-15 to 85°C (-5 to 185°F) plus solar loading
  Humidity: ....0 to 95% RH non-condensing
  Elevation: ....0 to 50000ft (0 to 15000m)

User Interface

⋗ Local Alarms
System LED: ....Green steady = system output normal, DC output
Off = no AC or battery power
Battery LED:......................Yellow steady = system on battery
Off = normal mode
Replace battery:................Red steady = replace one or two battery strings
Off = batteries within parameters
Replace battery A&B
(internal):...........................Red steady = replace one or both battery strings

Off = batteries within parameters

⋗ Remote Alarms
Connection:.......................Two five position IDC 24AWG, parallel connections
Pin 1 alarm return:.............Open collector return reference
Pin 2 AC fail:.....................On battery
Pin 3 replace battery:........One or both battery strings failed periodic self test
Pin 4 missing battery:........Less than eight batteries
Pin 5 battery low:...............Battery string voltage is less than 46.8Vdc

⋗ Local - Audible Indicator
Alarm on:..........................."Alarm Enable/Disable" toggle switch located on UPS
Batteries below voltage parameters

Agency Compliance

CSA/UL 60950, EN 60950, EN 55022 class B, FCC part 15 class B, GR-63 Sect 4.2 fire resistance, GR-1089 Sect 3 emissions, Sect 4 lightning and AC power fault, Sect 7 electrical safety, CE, C-Tick, RoHS 5 of 6

Related Components

Dry contact alarm extension kit for 4 x MTA loads
P/N: 0370016-001

Alarm relay kit for ONT loads
P/N: 0370037-001