

Power

FlexNet™ FMPS

Multipurpose Power Supply



- 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 performs periodic battery capacity testing and status reporting to the ONT and customer
- Battery heater option 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

Alpha extends its family of FlexNet 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 100ft between the FMPS and ONT, allowing the FMPS to be located close to existing power outlets. Individually monitored 48Vdc strings of standard 7.2Ah maintenance free, sealed lead acid batteries provide standby power. Battery heater models support extended runtimes at -40°C. LED indicators and an audible alarm provide local visual status, and PacketCable compliant telemetry connections to the ONT provide remote status reporting.

FlexNet FMPS

Specifications

Input

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

Output

Operational Output Power: 150W continuous
 170W, 10sec 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

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): Steady Red = 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

Physical

FMPS
 Dimensions (in): 14W x 23.75H x 5.5D
 (cm): 35.6W x 60.3H x 14D
 Weight (lb/kg): 25/11.3
 FMPS + Shipping Carton
 Dimensions (in): 17W x 28.5H x 11.75D
 (cm): 35.6W x 60.3H x 14D
 Weight (lb/kg): 30/13.6

Battery

Battery Type: Four or eight 7.2Ah Valve Regulated Lead Acid (VRLA) (Batteries sold separately)

Environment

Operating (with heater option): -40 to 46°C (-40 to 115°F) plus solar loading, 0 to 95%
 (without heater option): -10 to 46°C (14 to 115°F) plus solar loading, 0 to 95% humidity, 0 to 10000ft (0 to 3000m) elevation
 Storage: -15 to 85°C (-5 to 185°F), 0 to 95% humidity, 0 to 50000ft (0 to 15000m) elevation

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

Warranty

3 year repair or replace

Part Numbers

010-592-20-050 FlexNet FMPS, 120V Line cord, 150W, 48Vdc out, -40°C, Verizon
 010-592-20-052 FlexNet FMPS, FTTX Multipurpose PS, 120V line cord, 150W
 010-592-20-053 FlexNet FMPS, FTTX Multipurpose PS, 120V line cord, -40°C



FMPS with cover removed and two 7.2Ah battery strings installed

For more information visit www.alpha.com