Cambium Networks

Specification for a non standard Power over Ethernet DC injector used on ePMP

Cambium Networks part number: Gigabit Supply N000900L001A, 100Mbit Power Supply N000900L002A

General Specifications

Specification Parameter	Description
Input/Output	3-wire AC line desktop with shielded RJ45 plugs and 18 AWG drain
Black plastic housing	Desktop, rectangular brick shape, suggested approximate size 1.25"
AC input connector	IEC320 C6

Electrical Specifications

Specification Parameter	Description
AC Input Voltage Range	90-264Vac
AC Input Current	0.5A rms at 120VAC; 0.25A rms at 240VAC
AC input frequency	47 to 63 Hz
In-Rush current	30A at 120Vac; 60A at 240Vac
DC Output Power at 0C to 40C	15W max.
Efficiency	Meets Level V
No Load Power Consumption	Less than 300mW
EMI	FCC Class B, EN55022 Class B
Isolation (Hi-pot)	3000Vac for 1 minute, 10mA
Insulation resistance	500Vdc, 500Mohm min
Over current Protection	Short circuit, with auto recovery
DC Output voltage/current transient when AC line is applied while radio load is connected	Must start up with all radio platforms specified over temperature from 0C to 40C and using a 3 foot and 328 foot CAT5 cable
Start up time	within 3 seconds after AC line main is applied 0C to 40C
Over Voltage protection	Zener clamping
MTBF	50K hours minimum
RoHS and WEEE	Meets current directives
Energy Star and MEPS	Meets Energy Star 2.0, Aussie and Korea MEPS
Safety approvals	UL (UL60950-1 2nd Edition), cUL, Aussie RCM, C-Tick and
Output Voltage	30.0 Vdc +/-5%
Minimum Load Current	0A
Max Load Current	500 mA
Peak load current	600mA
Ambient Operating Temperature	0C to 40C
ESD	EN61000-4-2, Level 3
AC line surge	EN61000-4-5, Level 3
Immunity	EN61000-4-2, level 3; EN61000-4-3, level 2; EN61000-4-4, level 2;
Hold up time	10mS min at max load, 120Vac
Leakage current	250uA max
Humidity	20%-90%
Altitude	Standard (up to 6000 feet)
LED Green	LED location determined by supplier
Ripple	300mV p-p

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Specification Parameter	Description
DC Output/100BaseT model	Two shielded RJ45s: To radio (OUT): balanced data pins 1,2 and
DC Output/1000BaseT GBit model	Two shielded RJ45s: To radio (OUT): balanced data pins 1,2 and
DC Current Imbalance (1GBit model only)	15mA max. imbalance current through toroid
AC line PE grounding (3rd prong), all Ethernet data lines have 10 mil spark gaps to PE (ground)	3 pin AC input; 18AWG green with yellow strips (UL, CE requirement) drain wire must be connected from PE 3rd AC pin to RJ45 shield
Between DC secondary to AC line primary, ESD protection request for controller IC	Need to add zener diode from feed back input pin to controller IC's DC return. This adds ESD protection for the controller IC from DC secondary side to AC line side

Mechanical Specifications

Specification Parameter	Description
Drop Test	Dropped 32" onto all 6 sides one time in its enclosure onto a
Pull Test AC line cord from power supply	AC line cord should meet min. 10 lb pull test
Pull test CAT5 cable	Either RJ45 must meet 10 lb min. pull test
Laser etched label for AP GBit 1000BaseT version	Gigabit Data+ Power / Gigabit Data
Laser etched label for SM 100BaseT version	Data+ Power / Data