WiNPS 3S-ODU System Specifications

Cabinet Interfaces:

AC Input	Universal AC input: 110/220VAC
Network Input	1G copper or 1G Dark Fiber input GBIC transceiver to be provided by the customer
DC+ETH Output	3 ports Per Port: • 48VDC, 215W • ETH, CAT5, 100m
Local Management	ETH, (internal only-after opening the door)

AC Input:

Voltage	90-264Vac, single phase
Frequency:	47-63Hz
Inrush Current	≤ full load steady state current of the rectifier within rated limits
Efficiency	90% typical at 120Vac, full load rated power (650W)
AC input current	3.0 to 3.5A (nominal Vac) 4.9A maximum @150Vac
Power Factor	>0.99 at nominal conditions and 50-100% load; >0.98 at nominal conditions and 30-50% load
Input Protection	A 250Vac FAST ACTION Circuit Breaker

Mechanical:

Size [WxHxD]	55x52x52 cm
Weight	35 Kg
Input AC Connector	Terminal block
DC Output Connector	Terminal block
Local Management	RJ45

Management:

Management	Internet: Web-based management Interfaces: Telnet, SNMP, Web, Remote
SNMP	SNMP Client MIBs: MIB II, Private MIB
Remote Configuration	Auto Configuration: DHCP SW Download: via TFTP
PS Fault Alarms	Power Supply DC output Battery low voltage
Additional Alarms	TBD

DC Output:

Power	42-58VDC, 2 x 650W (3 Sectors BST)
Load	Max: 2x12A Peak: 2x13.5A
Line Regulation	Static <±0.1% Dynamic <±1% for any change within rated limits
Load Regulation	Static <±0.5% Dynamic <±1% for 40 to 90% load step 2ms recovery time
Turn On Delay	5 sec. Maximum (excluding soft start)
Hold-up Time	10msec minimum at 110Vac and full load
Turn-On Rise Time;	105 to 120% of IMax, constant current limit, automatic recovery, when cause of overload or short is removed
Over-current Protection:	105 to 120% of IMax, constant current limit, automatic recovery, when cause of overload or short is removed
Over-voltage Protection:	Shut down at 120 ÷ 125% of nominal output, AC input must be recycled to restart.
Temperature Protection:	Shutdown due to excessive ambient temperature at over heating or malfunctions of cooling fans. The sense point is at 90°C for the internal heat signal, unit recovers automatically typical hysterisis 20°C.
Current Share	The unit works with similar units to form a redundant power module configuration. A single wire load share mechanism is used between similar units.
Hot Swap	Internal O-Ring diode (FET)

Battery Compatibility

Voltage	12V (one string 48VDC)
Number	4
Type	Gelled Electrolyte
Capacity	44Ah (optional 33Ah, 26Ah)

Internal Switch Characteristics:

Ports	8x 10/100 Ethernet ports 1x optical
10/100BaseTX	Connector: RJ-45
	Transmission: Full/Half Duplex
	Range: Up to 100m
1000BaseSX/LX	Connector: SFP LC
Technology	Advanced chipset based. Store and Forward, full wire speed
Address Table	4K MAC addresses
Forwarding Rate	10Mbps – up to 14,880 pps 100Mbps – up to 148,800 pps 1000Mbps – up to 1,488,000 pps

Environmental:

Temperature	Operating: -40°C to +46°C + Solar radiation
	Storage: -40°C to +85°C.
Cold Start Temperature	-40°C
Temperature Coefficient:	≤100ppm/°C over the operating range
Humidity:	Maximum 5% to 95% RH non-condensation.
Altitude:	Operating -1640 to 9840ft
	Non- operating 40,000 ft.
Vibration:	Zone 4 requirements
Cooling:	two cooling fans
Water Tightness	NEMA Type 3R

Safety & EMC Regulations:

EMC	FCC class B, EN55022 CLASS B,
Safety	CSA C22.2 No 60950-1-03
	UL 60950-1
	IEC/EN 60950-1
	CE – MARK
EN61000-3-2	HARMONICS
EN61000-3-3	Voltage Fluctuation
EN6000-4-2	ESD +8KV AIR +4KV CONTACT DISCHARGE, performance criteria B
EN61000-4-3	Radiated Immunity: 80-1000Mhz 3V/m, AM 80% (1KHz), criteria A
EN61000-4-4	Fast Transient: 1KV for AC power port, 0.5KV for DC power I/O and signals Port, performance criteria B
EN61000-4-5	Surge: 2KV common mode and 1KV differential mode
EN61000-4-6	3VRMS, 80% A.M. BY 1kHz
EN61000-4-11	Voltage Dips and interruption: 30% reduction for 10mSec –Criteria B, 60% For 100mSec. Criteria C, 95% reduction for 5000mSec Criteria C.
Dielectric Withstand:	Input to case: 1500VAC.
	Input to output: 3000VAC
	Output to case: 2100VDC.
Leakage Current:	<3.5mA @ 265Vac 60Hz.
MTBF:	200,000 hours minimum per BELCOR 332,issue 6 specification @30°C