

Corning Optical Network Evolution (ONE™) Solutions Six-Module DC Power Supply Unit (PSU6)



PSU6 | Figure 1

Product Overview |

The Corning PSU6 is a compact, scalable DC enclosed power supply used for feeding Corning® optical network evolution (ONE™) solutions remote units as well specified network interface devices (NIDs). PSU6 provides up to 12 outputs of 57 VDC, at 100 W per output for a total power of 1200 W. PSU6 supports up to six hot-swappable modules, where each module provides two DC outputs.

Features	Benefits
Compact and scalable	<ul style="list-style-type: none"> 19-in, 1U rack-mount shelf supports up to six hot-swappable power modules
Support for third-party devices	<ul style="list-style-type: none"> Supports powering of specified network interface devices (NIDs)
Universal AC input	<ul style="list-style-type: none"> 85 to 265 VAC single input
DC output capacity	<ul style="list-style-type: none"> 12 outputs of 57 VDC, 1200 W total max output capacity (100 W per output)
Protection	<ul style="list-style-type: none"> High input voltage fuse protection. Low input voltage disconnect Overcurrent protection – continuous, hiccup mode, auto recovery Reverse polarity protection
Mixed mode support	<ul style="list-style-type: none"> 12 output inrush current circuits for support for different types of Corning optical network evolution (ONE) solutions remote units, as well as specified NIDs (see supported NIDs in specifications).
Integral fan cooling	<ul style="list-style-type: none"> Each power supply module includes an integrated fan module Fan activation in extreme temperatures only

Product Specifications

AC Input	
Voltage Range	85 to 265 VAC; 47-63 Hz via IEC socket Rated voltage (for safety approval): 100-240 VAC, 50-60 Hz
Current	Maximum input current at 85 VAC is 16.8 amp for six PSMs
Power Factor	> 0.925 at maximum load
Efficiency	For 100 VAC input voltage: > 86% minimum at 25°C and 85% minimum at 55°C For 100 VAC input voltage: > 88% minimum at 25°C and 86% minimum at 55°C

DC Output per Port	
Voltage	57 V constant output power
Maximum Current	1.7 amp
Power	100 W

Power	
Maximum System Output Power	1200 W @ 57 VDC
Polarity	Isolated; 57 V
Individual Module Power	200 W
Noise	Ripple < 100 Hz at max load @ 20 MHz BW
Monitoring	Status LED per PSM and per output
Identified Faults	Low input voltage Fan failure detection Output voltage out of range Internal fault

Protection	
Output Current Limit	Output current limit > 94 W and < 100 W Auto-recovery when current is back within range
Output Inrush	Current limiter supports startup with 500uF ± 20% load capacitance and 200 mA load
Over Voltage	Limit of 61 V ± 4%.
Input Protection	Auto shutdown and auto restart when correct voltage is restored
Input Fuses	Short circuit on main lines is protected by replaceable fuse

Temperature	
Operating Temperature	0 to +55° C (32 to +131° F)
Storage Temperature	20° to 85° C (-4° to 185° F)
Operating Humidity	Non-condensing relative humidity range: 5% to 95%
MTBF	262,800 hours

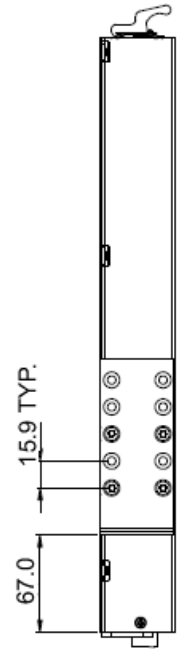
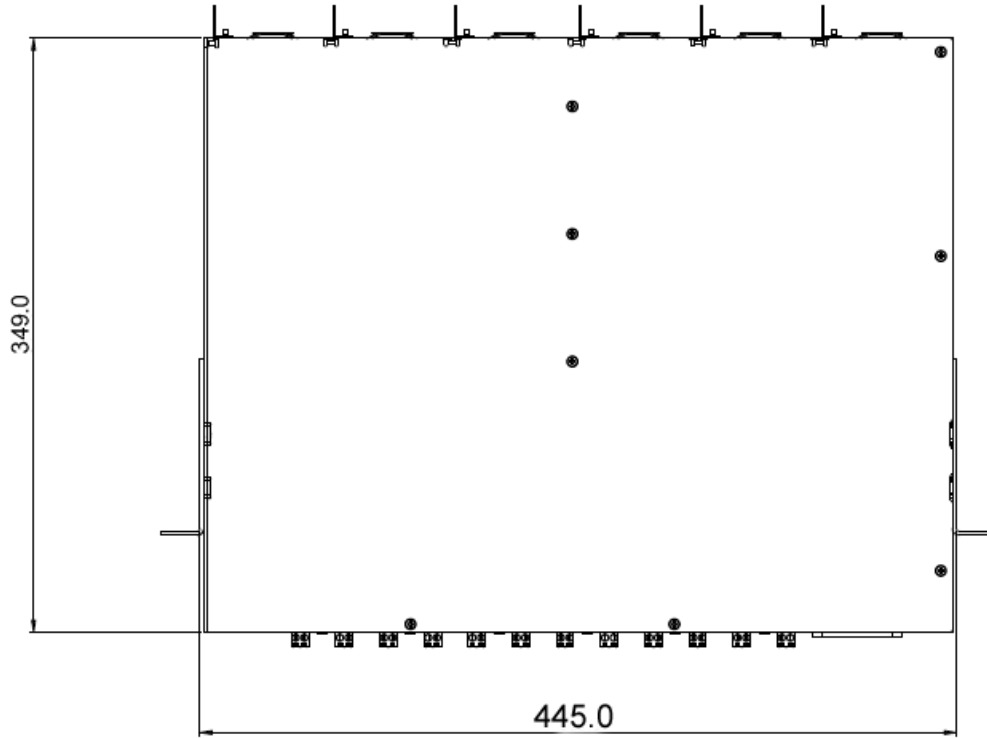
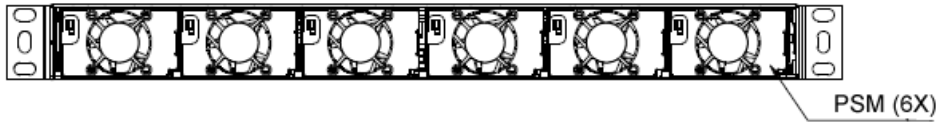
Physical	
Dimension (H x W x D) [enclosure]	1.73 x 17.51 x 13.74 in (44 x 445 x 349 mm)
Weight	Enclosure without PSM-I modules: 6.22 lb (2.825 kg) Per PSM-I module: 0.8 lb (0.36 kg)
Connectors	Input connector: TU-320-B-MB TECX or equivalent Output connector: PCIC16W7M400A1/AA POSITRONIC part number or equivalent
Mounting	19-in rack-mount (1U) Wall-mount

Safety Compliance	
	UL 60950, Third Edition UL to CAN/CSA 22.2 No.60950, Third Edition CB to IEC 60950 with all country deviations CE Marking

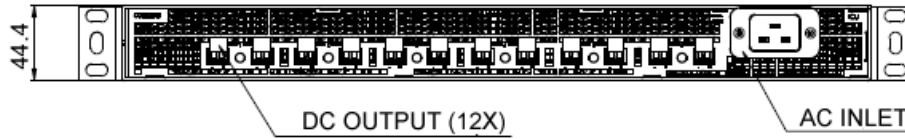
Ordering Information

Part Number	Description
PSM-I	Power supply module (up to six modules per PSU6)
PSU6-1U	Power supply unit with no PSM-I
PSU6-1PS	Power supply unit with one PSM-I
PSU6-2PS	Power supply unit with two PSM-I modules
PSU6-3PS	Power supply unit with three PSM-I modules
PSU6-4PS	Power supply unit with four PSM-I modules
PSU6-5PS	Power supply unit with five PSM-I modules
PSU6-6PS	Power supply unit with six PSM-I modules

Mechanical Dimensions



TOLERANCES UNLESS NOTED	
LIMITS (mm)	ALLOWED TOL (mm)
0-30	±0.25
30-120	±0.45
120-315	±0.6



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