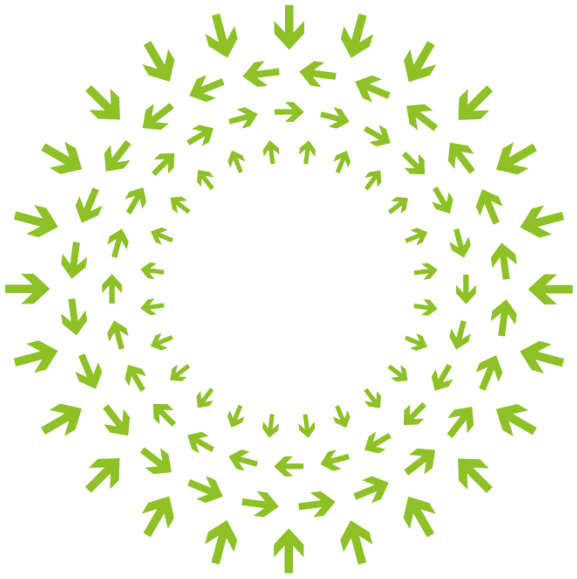

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Compute Project

Project Olympus
Universal Power Distribution Unit
Specification

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Revision History

Date	Description
11/1/2017	Version 1.0

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Figures

1 Overview of the Universal Power Distribution Unit Specification

Industry standard EIA racks are very versatile allowing a wide variety of IT gear to be installed. Distributing A/C power to these racks is done with managed and unmanaged Power Distribution Units. This document specifies managed and unmanaged Power Distribution Units (PDU) that are mounted in the EIA rack either consuming 2U space or 0U space when mounted behind the equipment. The Project Olympus Universal PDU interfaces to A/C power cords compliant to the Project Olympus Universal Power Cord specification to enable worldwide deployments with a change of only the equipment power cord.

1.1 Universal VAC Input Plugs and Cables

1.1.1 Cord Assembly Power and Current Rating

The Project Olympus PDU will connect to any 200-240VAC single phase 3 Wire, 200-240VAC 4 Wire, or 350 to 415VAC 5 Wire three phase facility with rated phase current up to 40A. Shown below are the four options supporting Project Olympus. Additional equipment power cords may be added.

Table 1. Equipment Power Cord Power and Current Capabilties

Assy Part Number	Description	Nominal Voltage	Equipment Load Limit	
			Power	Current
73 42 200 0032	30A 4Wire 9AWG	208VAC +/-10%	8.6kW	24A
73 42 200 0034	50A 4Wire 6AWG	208VAC +/-10%	14.4kW	40A
73 42 200 0030	30A 5Wire 9AWG/6.63mm^2 NA	415VAC +/-10%	17.2kW	24A
	32A 5Wire 9AWG/6.63mm^2 EU	400VAC +/-10%		25A

1.1.2 Universal Cable Assembly Breaker Protection from facility

The 30A 4 Wire L21-30 and 50A 4 Wire CS8365 cord assemblies shall have 30A and 50A protection respectively with UL marking and conformity to UL 489, NEMA AB1, AB3 ANSI Std. C37.16, ANSI Std. C37.17, C37.50, IEEE® Std. C37.13, UL 1066 and the National Electrical Code suitable for products certified to U.S., Canadian, European and Japanese standards.

The 32A cord shall have 32A protection with CE marking with conformity to CE RCCB, 2014/35/EU, 2014/30/EU, 2011/65/EU, EN61008-1:2012+A:2014+A11:2015, and EN 61008-2-1:1994+A11:1998

1.1.3 Universal OTS Universal 7 Wire interface PDU Connector

The PDU shall provide bulkhead or panel mount connection to be mated with the universal cord assembly described above.

Table 2. OTS Universal 7 Wire interface PDU Connector Part Number

Connector Name/ Assy	QTY	Input Connector Part Number	Input Connector Description	Comment

7 pin male pin with plastic locking housing	2	73 42 200 0029:	Harting Han-Eco bulkhead housing with plug modules	70A 1000V pin and safety ground pin, touch safe, hot swap rated 50A 250VAC

Table 3. OTS Universal 7 Wire Cord interface PDU Connector Pin Assignments

Facility Cable Options		**OTS UNIVERSAL 7 WIRE INTERFACE PDU Pin Assignment**		
4 Wire	5 Wire	Pin Assignment	Phase Description	
X	L1	A1	Phase A	
Y	L2	B1	Phase B	
Z	L3	C1	Phase C	
X	N	A2	Phase A	N
Y	N	B2	Phase B	N
Z	N	C2	Phase C	N
PE	PE	D1	Safety Protective Earth	

Figure 1. Universal 7 Wire Cord bulkhead connector pin number assignment orientation

2 Universal PDU Mechanical

2.1 Unmanaged Horizontal 2U Universal PDU Mechanical

Figure 2 depicts the 2U horizontal unmanaged PDU. Implementations are allowed to vary overall height and quantity of C13 outlets. Depicted is an unmanaged PDU, but managed PDU options would meet this specification provided the management interface is compliant to this specification.

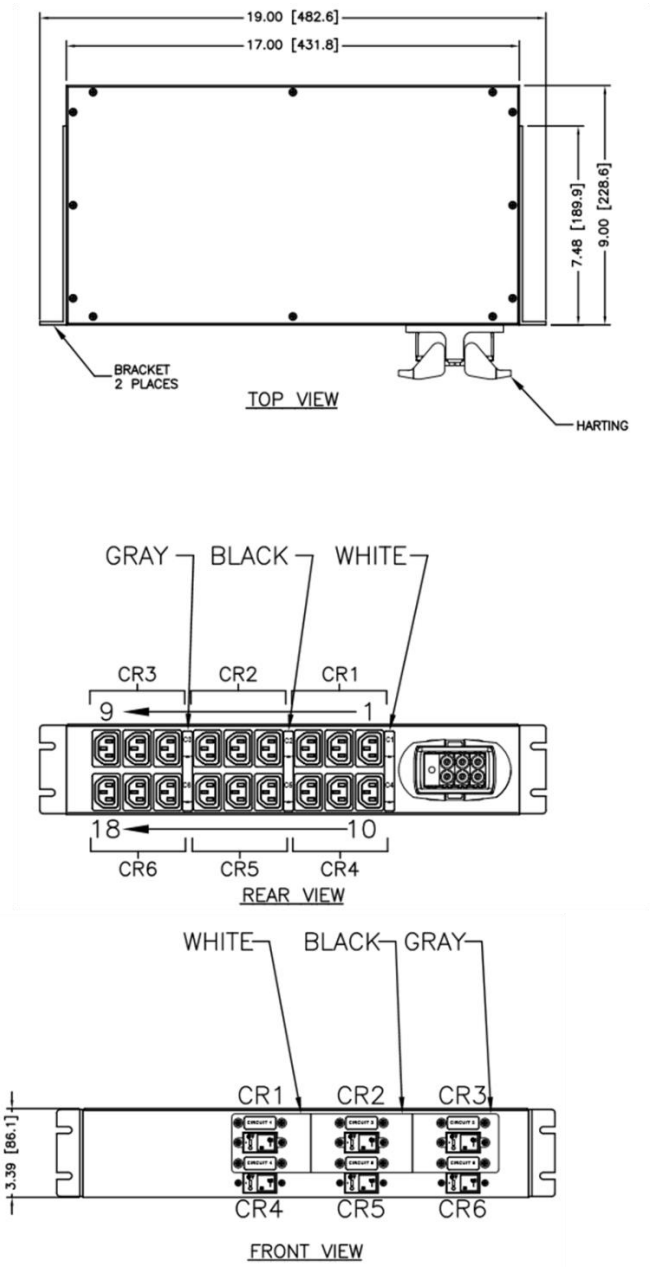

Figure 2. Unmanaged 2U Universal PDU Mechanical

2.2 Vertical Universal PDU Mechanical

The Vertical Universal PDU can be either managed or unmanaged. Figure 3 depicts the 0U vertical unmanaged PDU, Figure 4 depicts a managed version. Implementations are allowed to vary overall height and quantity of C13 outlets. Only unmanaged PDUs are built today. The interface for managed PDUs are yet to be defined.

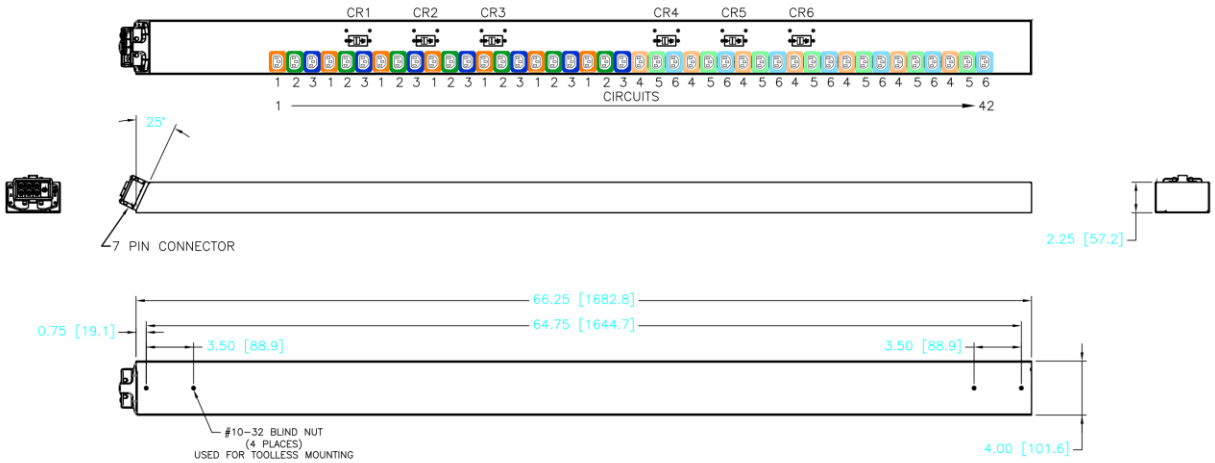

Figure 3 Vertical Unmanaged Universal PDU

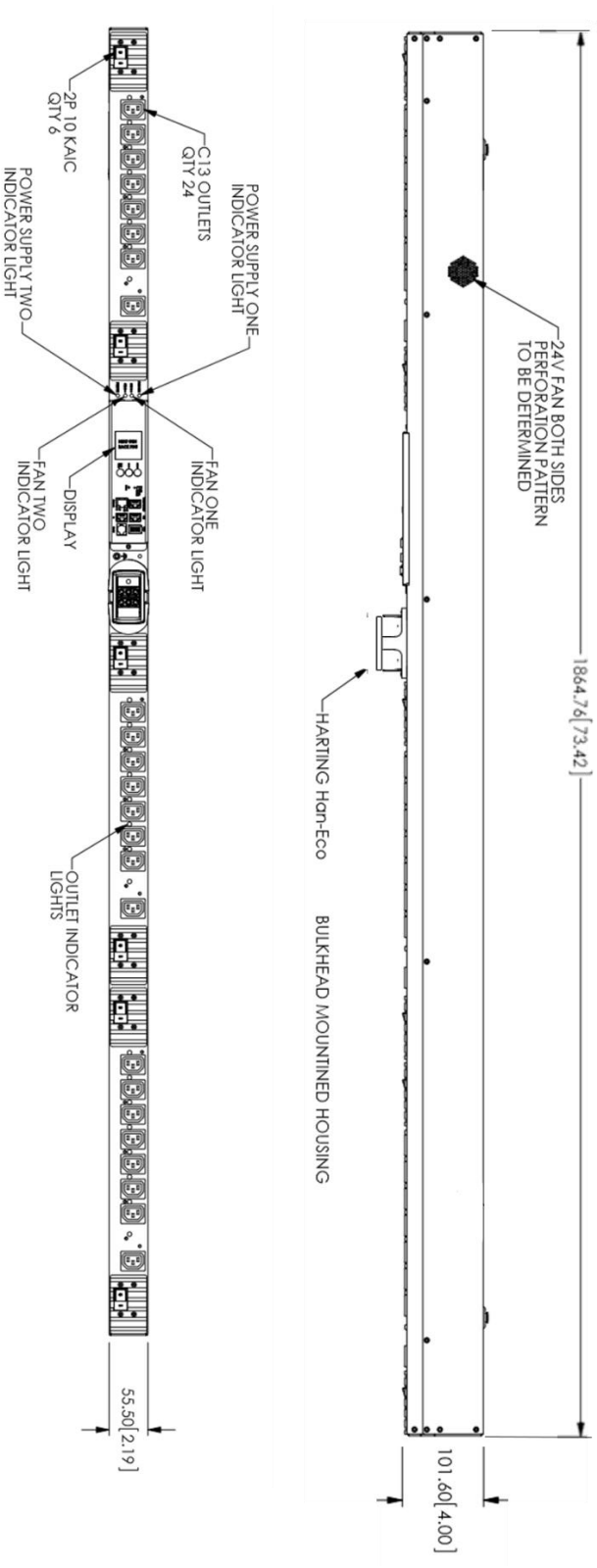

Figure 4. Managed Vertical Universal PDU Mechanical