Power Shelf Input Power Connector

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Agenda

• HARTING Overview
• Open Rack v2 Power Architecture
• Universal PDU Success Story
• Universal Power Shelf Benefits
• Input Power Connector Concept
• Questions
HARTING Facts & Figures

- $900M in turnover
- About 5,000 employees
- 13 production plants
- 44 sales companies
- Founded in 1945
- 100% owned by the Harting family
- Company HQ in Espelkamp, Germany

Specifications

Open. Together.
Open Rack v2 Power Architecture

Busway → gPDU → Power Shelf
Current Power Architecture

- Proprietary PDU to power shelf connection
- Limited in power capabilities
- Proprietary design, not in alignment with mission of Open Compute
- Prevents global architecture
Varying Power Requirements Prevent Global Architecture

- 20A
- 12 AWG
- NEMA L22-20P Plug

- 32A
- 10 AWG
- IEC 60309 Plug

Additional architectures can also be found inside these regions.
Connectorization Success Story
Microsoft Project Olympus

- Switched from hardwired rPDU to a Universal rPDU
- Lead time dropped from 6-8 weeks to 2 weeks
- Power cables can be reused
- Simplified supply chain and optimized inventory
Power Shelf v3 Proposal

- Remove gPDU
- Cable drop from bus bar connected directly to power shelf
- Streamline and simplify design
- Create one rack architecture that can be used globally
- NEED: OCP Accepted™ Input Power Connector
Benefits

- One rack design used internationally
- Reduce liability in inventory
- Fewer SKUs, faster deployment
- Retain cables during data hall refresh
- Decrease total cost of ownership
What do we need now?

- Input connector that can handle all power and dimensional requirements
- Industry proven technology leader to innovate and partner for OCP standardization
- OCP Accepted™ product with OCP Specification
Input Connector Concept

Dimensions:
- Height: <1.77” (<45mm)
- Length: <2.56” (<65mm)
- Depth: <2.36” (<60mm)

Specifications:

- RACK & POWER
- HARTING

Open. Together.
Input Connector Concept

- Finger protected contacts
- 50A/480V
- Positive latch
- Potential coding
- Can fit four connections on one power shelf
Timeline

March 15
- Receive feedback from OCP on conceptual design

Q2 2019
- Finalize design and specification
- Present to Rack and Power subgroup

Q3 2019
- Present specification to Incubation Committee
- Manufacture samples

Q4 2019
- List OCP Accepted™ power shelf input connector in OCP Marketplace
More Information

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