

Part Number: PL-PP48UL



1. GENERAL DESCRIPTION

A 19-inch, 2U loaded Category 6 unshielded patch panel with 48 integrated front 8P8C modular jacks arranged in two rows and rear insulation-displacement termination blocks. It is designed for 100 Ω balanced cabling up to 250 MHz and dual T568A/T568B termination. Category 6 / Class E performance applies only to the exact approved construction and must be confirmed for the completed permanent link or channel by field certification after installation.

48 PORTS Loaded panel	2U HEIGHT 88.90 mm nominal	19-INCH 482.6 mm series	UNSHIELDED UTP architecture
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2. PRODUCT HIGHLIGHTS

- 48 integrated front 8P8C modular ports in two rows, sequentially identified 1-48 with writable label areas.
- Rear dual-colour T568A/T568B IDC termination blocks; compatible with 110 and KRONE-style punch-down tools.
- Category 6 / Class E, 100 Ω balanced connectivity with a published frequency range of 1–250 MHz.
- Standard 482.6 mm (19-inch) rack/cabinet format in 2U nominal rack height (88.90 mm).
- Unshielded construction with no screen or shield-bonding path; install only as part of a UTP cabling system.
- Two rear cable-management bars are shown in the source image. Approved drawings, packing details, Category 6 component test data and material declarations are available upon request for the exact part number and lot.

TECHNICAL SPECIFICATIONS

48 PORT | 2U | CAT.6 UTP

3. TECHNICAL SPECIFICATIONS

Parameter	Specified Requirement / Technical Scope
Product type	48-port, two-row, loaded Category 6 UTP punch-down patch panel with integrated front jacks and rear IDC blocks
Part number	PL-PP48UL
Port capacity	48 integrated ports in two horizontal rows; sequentially identified 1 through 48
Rack format	482.6 mm (19-inch) series; front rack/cabinet mounting
Rack height	2U nominal rack height (88.90 mm); final envelope shall follow the approved mechanical drawing
Category / bandwidth	Category 6 / Class E, 100 Ω balanced connectivity, 1–250 MHz; installed link/channel performance requires field certification
Front / rear interface	Front: unshielded RJ45-type 8P8C modular jacks. Rear: insulation-displacement termination blocks
Wiring scheme / tool	T568A and T568B colour coding; 110 and KRONE-style punch-down tool compatible
Conductor compatibility	23–24 AWG solid or stranded copper conductors, as declared; conductor and insulation diameters shall match the approved IDC data
Construction / materials	Panel: 1.5 mm SPCC with black corrosion-resistant finish. Jack housing: PBT; IDC housing: PC; bracket: black ABS
Contacts / IDC finish	RJ45 contacts: phosphor bronze with nickel underplate and gold-plated mating zone. IDC terminals: phosphor bronze with tin-based finish. Exact plating and thickness per approved BOM / report; a lead-free finish is required for any RoHS claim
Durability / mechanical	Declared design targets: at least 750 jack mating cycles and at least 200 IDC termination cycles. Mating/withdrawal force and post-cycle electrical compliance shall meet IEC 60603-7-4 and be demonstrated by the applicable test report
Temperature	Declared operating/storage range: –30 to +70 °C; the manufacturer's report shall identify the test condition and performance over this range
Shielding	Unshielded / UTP construction; no screen continuity, shield termination or bonding-path claim
PoE / remote power	Passive connectivity component. PoE suitability depends on the exact jacks, cable, contact resistance/unbalance, bundling and temperature-rise validation; no standalone current rating is claimed
Environment / dimensions	Indoor, dry rack/cabinet use. Two rear cable-management bars are shown; supplied accessories, dimensions, weight, mounting hardware and packing quantity shall follow the approved drawing / packing list. No IP, outdoor, UV, plenum or flame-classification claim unless documented

4. STANDARDS AND TECHNICAL SCOPE

Reference	Status / Application
IEC 60297-3-100:2008	Mechanical reference for the 482.6 mm (19-inch) rack/panel interface
ANSI/TIA-568.2-E (2024)	Current balanced twisted-pair component and cabling reference for Category 6; supersedes ANSI/TIA/EIA-568-B.2 and ANSI/TIA-568.2-D
ISO/IEC 11801-1:2017 incl. Amd 1:2025 and Cor 1:2025 / EN 50173-1	Class E generic-cabling reference; completed link/channel compliance requires compatible components, correct installation and certification
IEC 60603-7-4:2010	8-way unshielded connector reference for Category 6 / Class E transmission performance up to 250 MHz
RoHS / REACH	No base claim without a valid declaration for PL-PP48UL and its exact BOM. A lead-free contact finish is required for a RoHS-compliant configuration
UL / ETL / CE / CPR	No base claim without a valid document for PL-PP48UL and the exact ordered construction; applicability shall be confirmed for the intended market