Phy-FiXX™

HCS Phy-FiXX™ Modular Managed Category 6 Unshielded RJ45 Copper Patch Panels

HES Cabling Systems
Connecting Networks™

Description

Phy-FiXX™ is a revolutionary and advanced physical layer management suit providing enterprises with the ability to manage their Physical Layer infrastructure with a level of visibility & integration unique in the structured cabling industry. Using a combination of software, electronics and structured cabling products, Phy-FiXX™ enables users to track and manage their investment from planning through to design, procurement, installation, moves, adds and changes (MACs) and the eventual upgrade of the infrastructure, thereby spanning its entire lifecycle.
HCS Phy-FiXX™ Category 6 Unshielded Patch Panels are used within the Phy-FiXX™ System. Each 1U 24 Port Patch Panel has one data bus connection port located on the rear of the panel. The data bus connection port connects the panel to the Phy-FiXX™ scanner via a standard RJ45 patch cord. The patch panel is used by the Phy-FiXX™ system to track connectivity in the patch zone and work area. LED status indicators on the panel show status of connectivity between the panel and the scanner and also provide panel guidance for work orders.
The patch panel works as a conventional patch panel when not connected to the Phy-FiXX™ system. All Phy-FiXX™ patch panels fully conform to and provide a substantial margin above all ANSI/TIA-568.2-D and ISO/IEC-11801 (2nd Edition) Category 6 component requirements. The HCS Phy-FiXX™ Logo and the DataLink 250 Trademark ensure long lasting high-performance and full support of most present applications.

Applications

HCS Phy-FiXX™ DataLink 250 Copper RJ45 patch panels are used within the Phy-FiXX™ System for horizontal distribution or equipment terminations in telecommunications rooms and for interconnection terminations in consolidation points, and they fully support the following protocols:

- ☑ 1GBASE-T Gigabit Ethernet
- ☑ ATM 155
- ☑ TP-PMD
- ☑ 100BASE-T “Fast Ethernet”
- ☑ ITU V.21 and X.11
- ☑ 100BASE-T2
- ☑ 100BASE-T4
- ☑ 100BASE-TX
- ☑ Token Ring 100 Mbps
- ☑ ATM 52
- ☑ ATM 25
- ☑ 10BASE-T Ethernet
- ☑ Token Ring 4 Mbps and 16 Mbps
- ☑ Broadband and Baseband Video
- ☑ ISDN Basic Primary Access
- ☑ 1BASE-5 Starlan
- ☑ ISALAN

Qualifications and Approvals

HCS Phy-FiXX™ DataLink 250 panels are supported by the Century™ Lifetime Warranty and by the DoubleSafe™ QA program as a part of complete HCS cabling system.
HCS Phy-FiXX™ DataLink 250 panels are tested at the component level and they comply to the following standards:

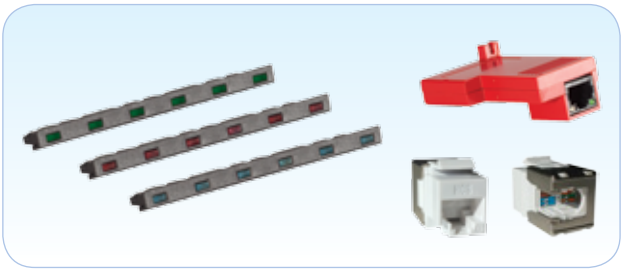
TRANSMISSION	EMC	SAFETY
☑ ANSI/TIA-568-C.1	☑ EN-55022, Class B (Europe)	☑ UL94 V-0 rated plastic materials
☑ ANSI/TIA-568.2-D	☑ FCC Part 15, Subpart J, Class A (USA)	☑ Zero-halogen in LS0H constructions.
☑ ISO/IEC-11801		

Benefits & Features

- ➔ Two power status indicators to ensure proper connection of power supply from the scanner.
- ➔ Data bus connection to the Phy-FiXX™ Scanner done with an industry standard RJ45 patch cord
- ➔ Category 6 field configurable for T568A or T568B wiring options.
- ➔ Integral cable management shelf ensures bend radius compliance.
- ➔ International hardware kit contains both ANSI and metric hardware
- ➔ Can be terminated using industry standard punch-down tools.
- ➔ Exceptional material properties and design - providing a unique Century™ Lifetime Warranty.
- ➔ Supplied with front labeling card index strip - providing simple and elegant port identification.
- ➔ Detailed installation manual in English and Turkish - providing clear and comprehensive instructions.
- ➔ Exceeding Category 6 performance - providing full support to Gigabit Ethernet.
- ➔ Robust and installer-friendly design - providing reduced installation and operating costs.
- ➔ Compatible with 22-24 AWG solid conductors - providing support to a wider range of cabling types.
- ➔ Support both Smart and Smart Ready modes of operations.
- ➔ Upgradable to Smart patch panel by simply plugging Smart Control Module.

Connectivity Features

- ➔ LED status indicators show status of connectivity between the panel and the scanner.
- ➔ LED status indicator on the panel calls for operator action (connect/disconnect patch-cord).
- ➔ LED status indicators on each port calls for operator action (connect/disconnect patch-cord).
- ➔ LED status indicators can be activated and deactivated from a remote location by the network supervisor.
- ➔ Port use indication on each port calls for monitoring connectivity (connect/disconnect patch-cord).



GENERAL PROPERTIES

Wire Size Range	22-24 AWG, Solid.
Material of Construction	CRS (cold rolled steel) 1.52 mm thickness.
Coating and Color	Black Zinc.
Connector Module Holder	High impact, Flame-retardant plastic compound, UL 94 V-0.
Jack Housing Material	Zinc Alloy plated bright Ni/Cu
IDC Plastic Housing	Polycarbonate UL94 V-0.
Jack Contact Material	Copper alloy plated with 1.25µm Gold over Nickel.
IDC Contact Material	Copper alloy plated with Matte Tin.
Plug Retention Force	6.8 Kgf (66 N) min.
Jack Contact Force	100 grams min.
IDC Terminations Cycles	20 min. using same-gauge wires.
IDC Type	Gas tight
Jack Insertion Durability	750 mating cycles
Storage Temperature Range	-10 to 60°C, 10-95% RH (non-condensing)
Installation and Operation Conditions	0 to 50°C, 15-90% RH (non-condensing)
Packaging	One unit per box.
Shipping Weight	560 gr.

TRANSMISSION AND ELECTRICAL SPECIFICATIONS

FREQ.	IL	NEXT	FEXT	RL
MHz	dB	dB	dB	dB
	Max	Min	Min	Min
1.00	0.2	85.0	84.0	53.0
4.00	0.2	81.0	75.0	54.0
8.00	0.2	78.0	70.0	56.0
10.00	0.3	77.0	68.0	57.0
16.00	0.3	73.0	58.0	58.0
25.00	0.4	70.0	60.1	60.0
31.25	0.4	68.0	59.0	57.0
62.50	0.5	64.0	53.0	44.0
100.00	0.6	60.0	49.0	34.0
200.00	0.6	55.0	43.0	23.0
250.00	0.8	52.0	41.0	20.0

Propagation Delay	2.5 nS max @ 1-250 MHz
Propagation Delay Skew	1.25 nS max @ 1-250 MHz
Current Rating	1.5 A max.
Contact Resistance	20 mOhm max (per contact)
Input/Output Resistance	200 mOhm max
Input/Output Resistance Unbalance	50 mOhm max
Voltage Rating	72 Vdc max
Dielectric Strength	1000 Volts rms for 1 minute
Insulation Resistance	100 MegaOhm min @ 500 Vdc
DC Resistance	0.1 Ohm max @ 20C
Initial Contact Resistance	2.5 mOhm
TCL	28-20·Log(f/100) dB min @ 1-250 MHz
Transfer Impedance	N/A

ORDERING INFORMATION

HCS P/N	Description	Blocks	Units	Size mm Hx/Wx/D	T568
P06-F2401-1U	24 port RJ45 Unshielded CAT 6 19" Phy-FiXX™ Patch Panel	110 IDC	1U	44.45x482.6x28.4	UNI
PCU-F00C1-1U	Control Unit for Phy-FiXX Copper Panels	-	1U	-	-