

## Global (Category 5E) RJ45 Patch Panels



The Global High Density Category 5 Enhanced patch panels presents 24 ports in a 1U rack space and offers optional rear cable management. The panel is a modular unit with four RJ45 circuits arranged on each of the six PCB's. A unique 4 or 8 way interchangeable fibre snap-in unit is also available for use with this product. This important feature allows the panel to present a mixed media presentation in the same chassis.

### Features and Benefits

- High density panel (24 ports per 1U)
- 568A or 568B wiring options
- Customised product facias available
- Can be supplied totally or partially loaded
- ISO/IEC 11801:95 TIA 568A Compliant (C5) and complies with SP-4195 (C5E)
- Accept Krone and 110 punch down tools
- Panel colour options
- Rear cable management options
- Slide label system
- Available in 1U 24 port to 4U-96 port configurations

### Technical Description

The printed circuit boards are designed to interconnect the high performance RJ45 jack to the IDC blocks. The performance exceeds the proposed Category 5E limits as defined by SP-4195.

The product offers positive ACR @ 200MHz and was previously called the RW Data Gold Category prior to this Category 5E proposal. It should be noted that each PCB can be removed (with suitable tooling) and either replaced for maintenance purposes or interchanged with one of the two fibre options. Both the 4 way and 8 way fibre modules include cable management and strain relief.

Each row of 24 ports occupies 1U rack space and is also available as a 2U or 4U unit. Optional rear cable management with use of either the RW Data clip in cable clamp or cable tie. The product is also provided with end location cable tie loops for situations when the cables are presented to the panel without the use of rear cable management bars.

To arrive at the optimum performance levels for this product it is advisable to use inter panel cable guides for patch cable management and strain relief. Port identification is by way of slide in strips either 6 x 4 way or 2 x 12 way and is supported by the Alpha Label software package.

## Product Construction and Performance Specification

- Jack life min. 1000 insertions
- Max. of two wires per IDC contact (same gauge)
- Wire gauge 22-26 AWG
- Worst pair cross talk @ 100MHZ : -49dB (Cat 5E limit -43dB)
- Return loss better than -23dB @ 100MHZ (Cat 5E limit -18dB)
- IDC contact life up to 50 re-insertions
- Maximum diameter of wire including insulation 1.44mm dia.
- Insertion loss > -0.2dB worst pair (100MHz)
- Fully compliant with proposed Cat 5E standard SP-4195 Draft
- Worst pair ELFEXT -38.3dB (Cat 5E limit -35.1dB @ 100MHz)

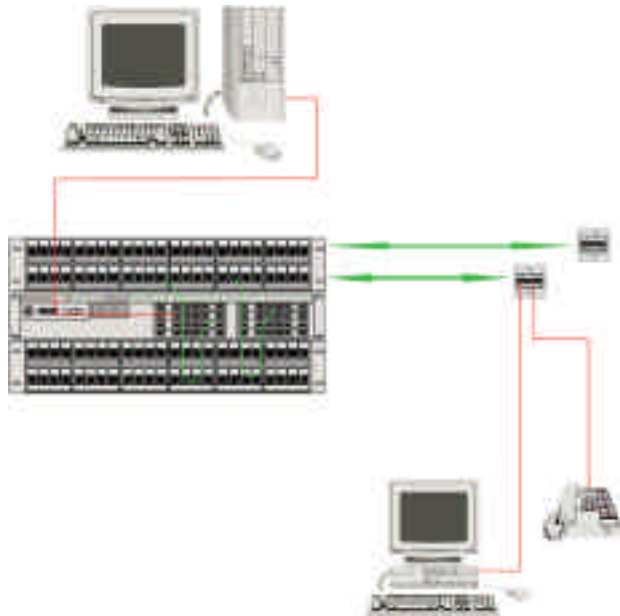
## Physical Dimensions

Product Code	Width	Height	Depth	Weight (Approx.)
1/2408IDC-G5-ENH	484mm	45mm	33mm	0.7Kg
2/4808IDC-G5-ENH	484mm	89mm	33mm	1.0Kg
4/9608IDC-G5-ENH	484mm	178mm	33mm	2.0Kg

## Applications

The Global High Density Category 5E patch panel may be used in any high performance voice and data cabling installation and is a key product in the Cabling Sciences package. An identical PCB assembly can also be mounted in a single gang face plate (see TS21).

The following protocols can be supported by this product and others designed to run over Category 5E twisted pair cabling. If you require absolute certainty that your future protocols will be supported for the next 5-10 years then you should consider installing our Category 6 250MHz UTP product. However, Cat 5E product is totally adequate for today's advanced network protocols and will support Gigabit Ethernet and 622 ATM over copper.



## Application Support

Protocol	Common Pairs used	Bit Rate	Bandwidth	Min. ACR	Cabling Class *
Analogue Voice Systems	1	Analogue	< 1MHz	5	Category 5 (Class D)
Digital Voice Systems	2	Analogue	< 1MHz	5	Category 5 (Class D)
ISDN	1 & 3	64 Kbits	< 1MHz	5	Category 5 (Class D)
ICL	2 & 4	1 Mbits	< 16 MHz	5	Category 5 (Class D)
10BaseT	2 & 3	10 Mbits	16MHz	5	Category 5 (Class D)
4/16 Mbit Token Ring	1 & 3	4/16 Mbits	20MHz	5	Category 5 (Class D)
100BaseT	2 & 3	100 Mbits	32MHz	5	Category 5 Enhanced
100BaseT4	1, 2, 3 & 4	100 Mbits	16MHz	5	Category 5 (Class D)
155 ATM	2 & 4	155 Mbits	100MHz	5	Category 5 Enhanced
AS400	1 & 2	1 Mbits	< 16MHz	5	Category 5 (Class D)
IBM 3270	1 & 2	1 Mbits	< 16MHz	5	Category 5 (Class D)
Baseband Video Inc. CCTV, etc.	1	Analogue	< 10MHz	5	Category 5 (Class D)
Building Management Systems	1, 2, 3 & 4	Analogue	< 1MHz	5	Category 5 (Class D)

\* Recommended Cabling Class to reliably support protocol and further enhancements of this protocol.

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