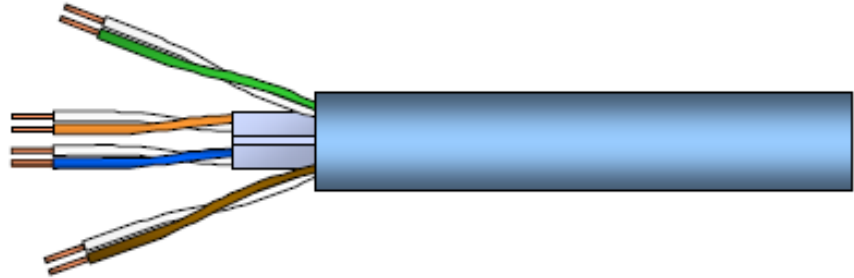
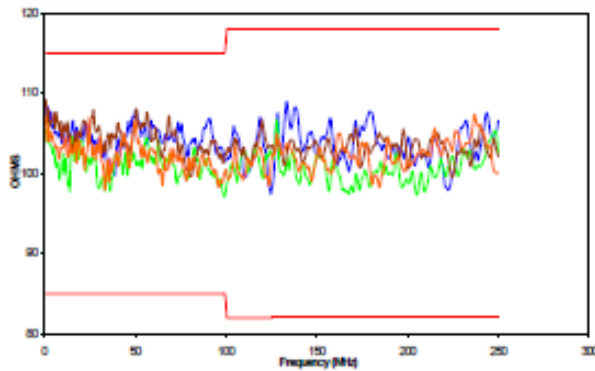


UTP Data Cable

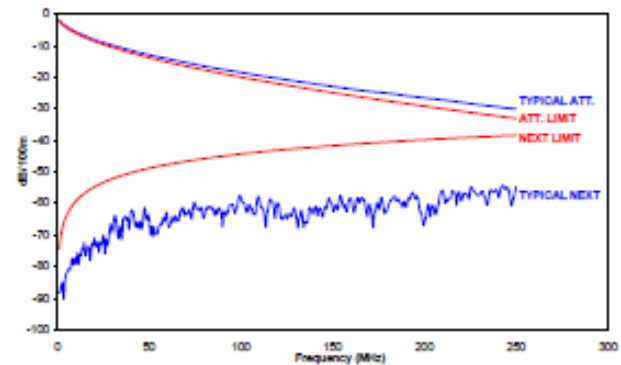


Cabling Application		Applicable Standards	
Structured Cable for Campus, Riser & Horizontal Installation		ISO/IEC 11801:2002 EN 50173(2002); EN 50288-6-1 ANSI/TIA/EIA-568-B.2-2001 and 568-B.2-1-2002 Fire Propagation Test: UL 1581 VW1(PVC only); IEC60332.1; EN50265-2-1	
Compatible with all Known Connection systems according to EN50173(2002)			
Cable construction			
Conductor	Bare Cu Wire	Outside Dia of Conductor (AWG)	0.59mm(23)
Insulator Material	PE	Outside Dia of Insulation	1.045 mm
Number of Twisted Pairs	4	Outside Dia of Sheath PVC(OHLS)	5.8(5.4) mm
Spline Material	PVC or LS0H	Weight PVC (OHLS)	40.8(46.1) kg/km
Sheath Material	PVC or LS0H	Sheath Colour	PVC – Grey LS0H - Purple
		Sheath Printing	Batch No. & Metre marking
Cable Properties		Electrical Characteristics @ 20 °C	
Min. Installation Bend Radius	8 x Dia	Characteristic impedance (1-100Mhz)	100±15 Ω
Min. Installed Bending Radius	4 x Dia	Characteristic impedance (100-250Mhz)	100±18 Ω
Max. Installation Tension	100N	DC Conductor Loop Resistance	25 Ω/100m
Max. Installed Tension	Zero	Max. Resistance unbalance	≤2%
Installation Temp. Range (Installed)	0 to 5°C	Nominal Velocity of Propagation	66%
Operating Temp. Range	-20 to 6°C	Nominal Capacitance	50 pF/m
		Max. Capacitance unbalance	1600 pF/km
		Insulation Resistance (500V)	≥2000 MΩ.km
Packaging		Notes	
Reel Sizes	P4		
Length per Reel	305m		
Reel Dimensions	Ø400mm		
Weight (approx.)	19kg		

Performance Impedance



Attenuation & NEXT



Ordering

Category 6 UTP PVC 305m Grey
 Category 6 UTP LS0H 305m Purple

CMS Code:

HT-305C6
 HT-305C6LSH

HT Code:

CA085
 CA076

Applications Supported

Network Sciences Category 6 UTP cable is designed to support any data or voice system that is capable of running over a Category 6 system. When used with Category 6 patch panels and outlets from the Network Sciences range the combined performance exceeds the Category 6/Class E link and channel requirements. The chart below shows the performance requirements of today's networking protocols.

Protocol	Common Pairs	Bit Rate	Bandwidth	Cabling Class used*
Analogue Voice Systems	1	Analogue	< 1MHz	Category 5 (Class D)
Digital Voice Systems	1	Analogue	< 1MHz	Category 5 (Class D)
ISDN	1 & 3	64/128Kbits	< 1MHz	Category 5 (Class D)
ICL	2 & 4	1Mbits	<16MHz	Category 5 (Class D)
10BaseT	2 & 3	10Mbits	16MHz	Category 5 (Class D)
4/16 Mbit Token Ring	1 & 3	4/16Mbits	20MHz	Category 5 (Class D)
100BaseT	2 & 3	100Mbits	32MHz	Category 5 (Class D)
100BaseT4	1, 2, 3 & 4	100Mbits	16MHz	Category 5 (Class D)
155 ATM	2 & 4	155Mbits	100MHz	Category 5E (Class D-2000)
AS400	1 & 2	2Mbits	<16MHz	Category 5 (Class D)
IBM 3270	1 & 2	1Mbits	<16MHz	Category 5 (Class D)
Baseband Video CCTV, etc.	1	Analogue	<10MHz	Category 5 (Class D)
Building Management Systems	1, 2, 3 & 4	Analogue	<1MHz	Category 5 (Class D)
1000BaseTx	1, 2, 3 & 4	1Gbits	100MHz	Category 5E (Class D-2000)
1000BaseT	2&3	1Gbits	200MHz	Category 6 (Class E-2000)

GigaBand RJ45 Patch Panels



GigaBand is the premium product group within the HellermannTyton Network Sciences cabling system. Designed to meet the exacting standards of mission critical installations where network down time and poor system performance area not a possibility. The individual modular design of the GigaBand system allows for uncompromised performance and quality.

The panels include our unique aluminium snap-on rear cable manager and a set of Rack-Snap rack inserts as standard.

Produced in the HellermannTyton UK production facility under exacting ISO9000-2000 quality standards, the GigaBand system offers the end-user the perfect combination of Price,

Technical Description

GigaBand and GigaBand HD Category 6 patch panels are available in either a medium density (1U,16 ports) or high density (1U, 24 ports) configuration.

The PCB's used within these panels are also interchangeable with either GigaBand or GigaBand Triple (high density) wall outlets for installation flexibility.

Each of the individual PCB modules are mounted in the unique Alpha-Snap plastic moulding which is attached to the front panel.

Features and Benefits

- High density panel (24 ports per 1U)**
- Individual port modules**
- 568A or 568B wiring options**
- Customised product facia available**
- Can be supplied totally or partially loaded**
- Meets all ISO/TIA Category 6 performance standards**
- Backward compatible with Cat 5E and 5**
- Available in 1U, 16 port to 6U, 96 port configurations**
- Accepts Krone and 110 punch down tools**
- Available in UTP and FTP versions**
- Includes Rack-Snap inserts**
- Includes aluminium rear cable management**
- Patented slide label system+ software available**
- Jack life min. 1000 insertions**
- Max. of two wires per IDC contact (same gauge)**
- Wire gauge 22 - 24 AWG**

The panel can be supplied partially loaded and expanded as required. Each PCB module is equipped with a cable retention device and the end positions of each half of each horizontal row are colour coded and numbered for error free termination.

There are three different types of optional rear cable management, each providing anchor points for cables either entering the rear left, right, or rear left and right side of the panel. The 'Alpha Label' software package enables straight forward port labelling.

Ordering Codes:

HT-PP24MGB	1u 24 port category 6 High Density patch panel
HT-PP48MGB	2u 48 port category 6 High Density patch panel
HT-PP16LGB	1u 16port category 6 patch panel
HT-PP32LGB	2u 32 port category 6 patch panel
HT-PP48LGB	3u 48 port category 6 patch panel

Dimensions:

Ordering Code	Height	Width	Depth	Weight (Approx.)
HT-PP24MGB	44mm	484mm	50mm	1Kg
HT-PP48MGB	88mm	484mm	50mm	2Kg
HT-PP16LGB	44mm	484mm	50mm	1Kg
HT-PP32LGB	88mm	484mm	50mm	2Kg
HT-PP48LGB	134mm	484mm	50mm	3Kg

Applications Supported

These GigaBand Category 6 products are designed for use in any voice and data guaranteed cabling site under the HellermannTyton Network Sciences package and will support both Gigabit Ethernet and ATM 622 over copper with total reliability. GigaBand and GigaBand HD patch panels will also deliver positive ACR at 400 MHz when used in conjunction with HellermannTyton Network Sciences

Category 6 approved cable. These products also offers enhanced performance for video applications attributed to its return loss and next performance. The patch panels allow users total flexibility between host and user devices within the cabling network and can support many different known or currently existing protocols by use of suitable baluns or adaptors.

Protocol	Common Pairs	Bit Rate	Bandwidth	Cabling Class used*
Analogue Voice Systems	1	Analogue	<1MHz	Category 5 (Class D)
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Building Management Systems	1, 2, 3 & 4	Analogue	<1MHz	Category 5 (Class D)
1000BaseTx	1, 2, 3 & 4	1Gbits	100MHz	Category 5E (Class D-2000)
1000BaseT	2&3	1Gbits	200MHz	Category 6 (Class E-2000)

Category 6

GigaBand RJ45 Patch Panels

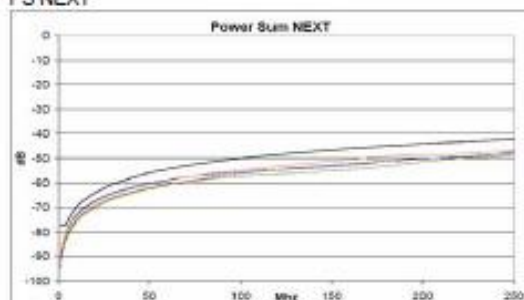


Connecting Hardware Test

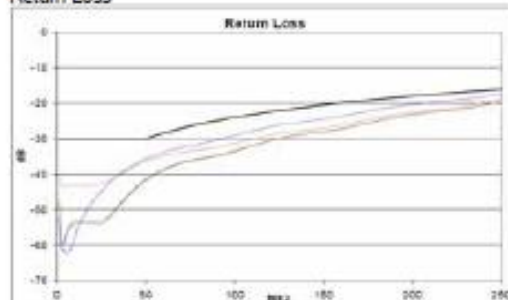
(Patch Panel only)

Tested from: 1 MHz
Tested to: 250 MHz
Standard: ANSI/TIA/EIA 568-B.2
Limits: Category 6 - Connector

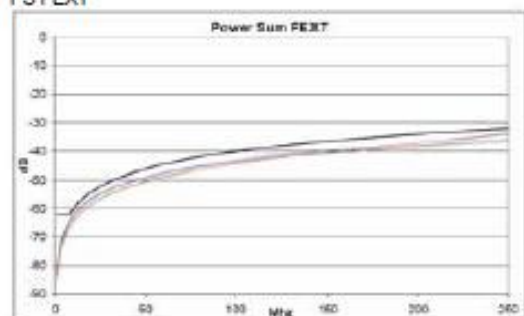
PS NEXT



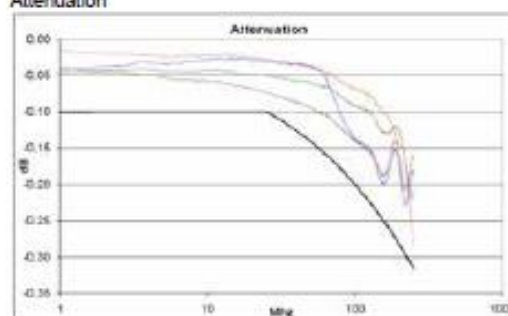
Return Loss



PS FEXT



Attenuation



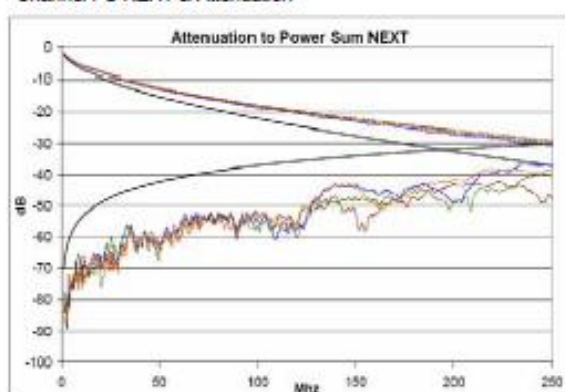
Channel Test

(Patch Cable, Patch Panel, Cable, Outlet & Patch Cable)

Tested from: 1 MHz
Tested to: 250 MHz
Standard: ANSI/TIA/EIA 568-B.1
Limits: Category 6 - Link

Each of the panel's circuit boards interconnect the high performance RJ45 jack to the IDC blocks, providing performance which when installed with HellermannTyton's category 6 cable easily exceeds the TIA Category 6 and ISO/IEC Class E performance standards.

Channel PS NEXT & Attenuation



Channel Return Loss

