



# 6

# LAN Connectivity

RapidNet

# HellermannTyton

Technical Data Sheet

## RapidNet 6 Port Category 6

### Cassette to Keystone Jack

#### Application/Product Description

The HellermannTyton Category 6 Cassette to Fan Out is pre-terminated with 6 RJ45 ports within the cassette and with 6 RJ45 Keystone Jacks at the other end.

The Category 6 RapidNet looms are designed and tested to support Primary (Campus), Secondary (Riser) and Tertiary (Horizontal) applications for 10Base-T (Ethernet), 100Base-T(Fast Ethernet), 1000Base-T(Gigabit Ethernet), PoE and PoE+.

When used with HellermannTyton Category 6 patch panels, outlets and patch leads the combined performance exceeds Category 6/Class E link and channel requirements.

RapidNet Category 6 looms are available in lengths from 5m to 90m.



RapidNet Category 6 Cassette to Keystone Jack

#### Cable Specification

Electrical Characteristics @ 20°C	Specification
DC Loop Resistance	≤169Ω/km
Resistance Unbalance	≤2%
Insulation Resistance (500V)	≥2000MΩxkm
Capacitance at 800Hz	Nom. 43nF/km
Capacitance Unbalance (pair to ground)	≤1500pF/km
Characteristic Impedance (1-100MHz)	(100 ± 15)Ω
Nominal Velocity of Propagation	Approx. 66%
Propagation Delay	Nom. ≤427ns/100m
Delay Skew	Nom. ≤12ns/100m
Test Voltage (DC, 1 min) Core/Core	1000v

#### Cable and Cassette Standards

##### Cable

- BS EN 50173
- ISO 11801:2002 (inc. Amend. A1 & A2)
- ANSI/TIA/EIA 568-C.2
- IEC 61156-5
- BS EN 50288-10-1

##### Cable Sheath

- IEC 60332-1
- IEC 60754-2
- IEC 61034

##### Category 6 Cassette

- ISO 11801:2002 (inc. Amend. A1 & A2)
- BS EN 50173
- ANSI/TIA/EIA 568-C.2

#### RapidNet Loom Performance Characteristics

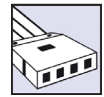
Frequency (MHz)		1	100	250
Insertion Loss (dB/100m)	Spec	3.0	18.6	31.1
	Typical	1.5	15.6	25.1
NEXT (dB)	Spec	65.0	41.8	35.3
	Typical	92.5	62.0	47.0
ACR-N (dB)	Spec	62.0	23.3	4.2
	Typical	91.0	46.4	21.9
Return Loss (dB)	Spec	19.1	14.0	10.0
	Typical	26.6	32.7	25.8
PS-NEXT (dB)	Spec	62.0	39.3	32.7
	Typical	86.7	56.7	41.5
PS ACR-N (dB)	Spec	59.0	20.7	1.6
	Typical	85.2	41.1	16.4
ACR-F (dB/100m)	Spec	64.2	24.2	16.2
	Typical	81.9	42.7	35.3
PS ACR-F (dB/100m)	Spec	61.2	21.2	13.2
	Typical	76.4	37.0	30.5

\*Typical values are for permanent link tests when using the complete HellermannTyton Data System.

This document is subject to change without notice.

Further information and datasheets at [www.htdata.co.uk/products](http://www.htdata.co.uk/products)

DS-RN-6PORT-C6-CAS-KS-R10

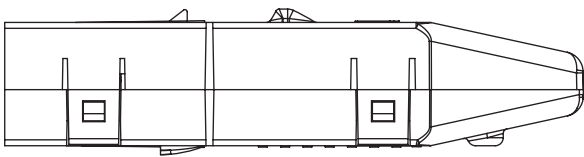


**Cassette Specification**

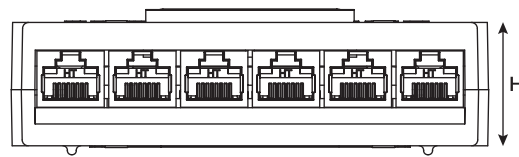
<b>Port Count</b>	6		
<b>Dimensions (mm)</b>	H	W	D
	31.0	107.0	130.0
<b>Outlet Style</b>	RJ45		
<b>RJ45 Jack Life</b>	Minimum Insertions 1000		

Cassette Materials		Jack Materials	
<b>Cassette Cover</b>	Polycarbonate ABS	<b>Modular Jack Housing</b>	Polybutylene
<b>Colour</b>	Black	<b>Contacts</b>	Copper Alloy/Selected Gold Plate

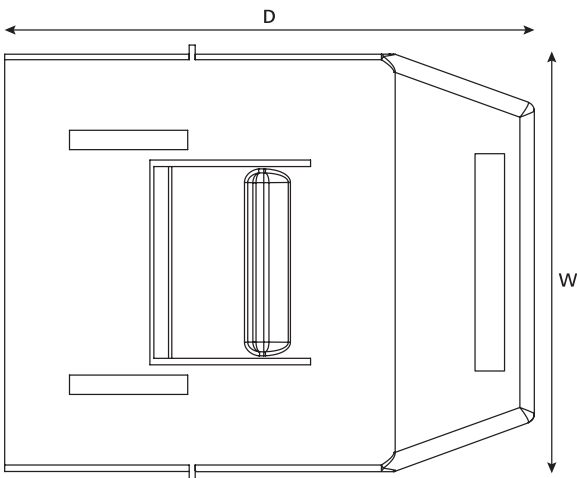
**Technical Diagrams**



Side view



Front view



Top view