

# DYNET DATA CABLE

100MHz 100Ω STP 4 pair CAT5E

DyNet data cable is specifically designed for high reliability RS485 network wiring. In addition to a twisted pair for RS485 data, conductors are provided to supply DC power to network powered peripherals. Conductors are shielded for maximum data integrity. The data cable is flexible, as all conductors are stranded, which also allows for robust termination into pressure plate style terminals used on Philips Dynalite equipment. The extra thick outer jacket is mains rated for use in switchboards and enhances the robustness of the cable. The cable is supplied in 305 metre lengths.

#### technical data >>>



Conductor

Insulation

PET Tape

AL Tape

Drain Wire

Rip Cord

Jacket

Conductors

4 twisted pairs and shield

Construction: Stranded Bare Copper 7 x Ø 0.23mm (24AWG)

Insulation: Polyethylene PE Ø 1.00±0.02mm

**Pair Identification** 

PAIR 1: blue/white-blue PAIR 2: orange/white-orange PAIR 3: green/white-green PAIR 4: brown/white-brown

Shielding

Aluminium/Mylar tape, 100% coverage Draw Wire: Tinned Copper

Ø 0.51mm (24AWG)

**Mechanical Characteristics** 

Outer jacket construction: PVC Thickness: 0.74±0.05mm Ø 7.3±0.20mm

Outer jacket colour: Orange

Minimum cable bending radius installed: 8 times outer cable diameter

Maximum tensile load - Installation:

100 N

Maximum tensile load - Installed: No stretch

#### **Electrical Properties**

Characteristic Impedance: 100±5Ω @ 100MHz

DC loop resistance: Max. 190 Ω/km

DC resistance imbalance: Max. 2.5%

Dielectric strength between pairs:

1KV RMS/minute

Dielectric strength conductors to screen:

2.5KV RMS/minute

Capacitance: 56pF/m

Capacitance Imbalance: Max. 3.3pF/m

Velocity of Propagation: <620 nsec/100m @ 100MHzΩ

Outer jacket voltage rating: 600V RMS

#### Operating Environment

Installation: 0°C to +50°C Operation: -20°C to +60°C

#### Standards Compliance

TIA/EIA-568B.2 Category 5E UL Verified E227171 ACA Approval N1756

**Packaging** 

Cable length: 305 metres

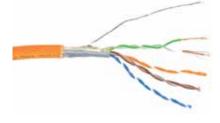
Carton: H 425mm x W 212mm x D

425mm

Weight: 15.0 Kg

Order Code

DYNET-STP-CABLE



## electrical performance \}\

Frequency	Attenua- tion, Max (dB/100M)	NEXT (dB)	PS NEXT (dB)	ELFEXT (dB)	PS ELFEXT (dB)	Return Loss (dB/100m)
1.0MHz	3.10	65	62	64	61	20.00
4.0MHz	6.10	56	53	52	49	23.00
10.0MHz	9.70	50	47	44	41	25.00
16.0MHz	12.40	47	44	40	37	25.00
20.0MHz	13.90	46	43	38	35	25.00
31.25MHz	17.60	43	40	34	31	24.30
62.5MHz	25.50	38	35	28	25	21.50
100.0MHz	33.00	35	32	24	21	20.10

## **PHILIPS**



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### **PHILIPS**



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DyNet Data Cable Data Sheet Rev F May 2009
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