



RS-485 CABLE

TDS Doc.No:PIL/TE/250425/005809

DESIGN CODE : ICRS05TPUAY1001P001SA

Particulars	1P/2 Core x 17 AWG (1.0 Sqmm)
Manufacturer Name	
Application	Low capacitance data cables RS 485, Internal wiring or external interconnection for electronic equipment
Voltage Grade (V)	300/500
Conductor	
a) Material	Stranded Annealed Tinned Copper
b) No. of Standing (No's)	7.00
c) Stand Size (mm)	0.42 (25 AWG)
d) Shape of conductor	Round
Insulation	
a) Material	High Density Polyethylene
b) Nom Thickness of insulation (mm)	0.6
c) Method of Application	Extrusion
d) Nom Insulation Diameter (mm)	2.5
e) Pair Identification	White - Blue
Pairing/Assembly	Two insulated conductors uniformly twisted together to form a pair with suitable Lay
Laid -up	Twisted pairs laidup with suitable lay & wrapped helically by non hygroscopic Polyester tape with suitable overlap.
Overall Shield	
a) Material	Aluminium mylar tape
b) Thickness (mm)	0.021
c) Overlap (mm)	2
d) Coverage (%)	100
e) Continuity Material/ Cross Sectional Area (Drain Wire)	ATC Drain Wire / 20 AWG (7/0.30mm)
Overall Screen	
a) Material	Annealed Tinned Copper
b) Dia of Braid wire (mm)	0.10mm
c) Braiding Coverage (%)	60
Rip Cord	Nylon rip chord

Format ID: TE/QMS/F/07, R-00, Date: 16/03/2025

Outer Sheath	
a) Material	PVC
b) Grade	ST1
c) Colour	Black
d) Thickness Min. (mm)	1.1
e) Approx. Overall Diameter (mm)	8.50 ± 2
Electrical Parameter	
a) Conductor Resistance @ 20°C (Ω/Km)	Max.18.5
b) Capacitance (core to core) (nf/km @800/1000 KHz)	≤ 100
c) Capacitance (core to Shield) (nf/km)	≤ 250
d) Characteristics impedance (Ω)	120
e) Loop Resistance (Ω/Km)	Max. 37.0
f) Insulation Resistance (Ω/Km)	5 G
g) Velocity of Propagation (%)	78
h) Dielectric Strength (DC Voltage)	
i) Operating Voltage (V)	300
General and Environmental Characteristics	
a) Temp Range operation storage (°C)	-10 to + 70
b) Temp Range installation (°C)	-0 to + 50
Minimum bending radius- operation	12 X Overall Diameter
Standard Packing Lengths (M)	1000 mtrs
Prominently Printing Marking on the Cable	"YEAR" "POLYCAB" "1 PAIR x 17 AWG" "RS-485" Seueential mtr Marking