

Client : Man

Distribution list : Br, La, TL, Man

Introduction : Teldor, a cable manufacturer from Israel is interested to test his cable with our modules.
We shall test the link and the quality of the contact.

Specimes :

Cable Gigador Junior	4 x 2 x AWG 23 S/STP	Teldor P/N 9928654103
Cable Basic Solution	4 x 2 x AWG 24 FTP	Teldor P/N 8375204107
Cable Basic Solution	4 x 2 x AWG 24 S/FTP	Teldor P/N 9375204107

Test procedure : Measurement of the Link Performance
test of the solderless connection

Requirements : ISO/IEC 11801: 1995 Class D (Next Attenuation, ACR)
EN 60352-4: 1994 Solderless connection Part 4 Solderless non-accessible insulation
Resistance difference after climata test < 5m Ω
climata: short programm (IEC 352-4)
fast change of temperature (-40...+70°C, 5 cycles) IEC 68-2-14 Na
damp heat cycling test (+25...+55°C, damp >93%, 6 cycles) IEC 68-2-30Db
micrograph test of the connection

Results : Performance: see annex
Micrograph: see annex
Resistance:

Cable	S/STP	S/STP	S/STP	FTP	FTP	FTP	S-FTP	S-FTP	S-FTP
Contact	ΔR [m Ω]	ΔR [m Ω]	ΔR [m Ω]	ΔR [m Ω]	ΔR [m Ω]	ΔR [m Ω]	ΔR [m Ω]	ΔR [m Ω]	ΔR [m Ω]
1	0	0.2	0	0	0.1	0.1	0.2	0.1	0
2	0.3	0.4	0.4	0	0.1	0.1	0.5	0.1	0.2
3	0.1	0.2	0.3	0.1	0.2	0.1	0.3	0	0.1
4	0.3	0.4	0.7	0.1	0.2	0.2	0.2	0.2	0.1
5	0.4	0.4	0.3	0.2	0.7	0.3	0.5	0.3	0.1
6	0.2	0.2	0.2	0.1	0.1	0.3	0.2	0.1	0
7	1.0	0.7	0.6	0.5	0.9	0.5	0.6	0.5	0.6
8	0.8	0.4	0.7	0.4	0.9	0.6	0.4	0.2	0.3

Assessment : Performance: The Cable shows at 100 MHz an ACR value > 19 dB on the worst case.
The normative value is 4 dB, so we can say, that the cables meets the requirements.

Resistance: The resistance difference is < 1m Ω . so we meet the requirements of the standard.

Micrograph test: The graphs shows a good quality of connection. The drain is deformed and pressed deep enough into the connection.

Summary: We can say, that all the Teldor cables could be connected with our ACS module.