

Recommended link distances for EQUITEL equipment

Single channel and multichannel

Link	Singlemode fibre (9/125)		Multimode fibre (62,5/125)		
	A 1,310 nm.	B 1,550 nm.	C 850 nm.	CM 850 nm.	D 1,310 nm.
A164 – A163			4 Km. (15 db)	2.5 km (10 db)	9 km (12 db)
A164 – A115			4.4 km (16 db)	2.9 km (11 db)	11 km (14 db)
A161 - A163			4 km (15 db)	2.5 km (10 db)	9 km (12 db)
A161 – A115	35 km (19 db)		4.4 km (16 db)	2,9 km. (11 db)	11 km (14 db)
A161 - A112	35 km (19 db)		4.4 km (16 db)	2.9 km (11 db)	11 km (14 db)
A162 - A163			4 km (15 db)	2.5 km (10 db)	9 km (12 db)
A103 - A112	35 km (19 db)	53 km (19 db)	4.4 km (16 db)	2.3 km (9 db)	11 km (14 db)
A172 – A174			5.8 km (21 db)		
A175 – A177			2.5 km (10 db)		
A176 – A178			4 km (15 db)		
A191- A192	45 km (25 db)	70 km (25 db)			
A194 – A195	45 km (25 db)				
D441 – D442	37 km (20 db).	60 km (20 db)			
D451 – D452	45 km (25 db)				

Data

Link	Singlemode fibre (9/125)		Multimode fibre (62.5/125)		
	A 1.310 nm.	B 1.550 nm.	C 850 nm.	CM 850 nm.	D 1.310 nm.
A602 – A612	35 km (19 db)	53 km (19 db)	5.0 km (18 db)	4 km (15 db)	15 km (19 db)
A721	40 km (24 db)			4 km (15 db)	
N551	45 km (25 db)	70 km (25 db)	6.5 km (23 db)	5.4 km (20 db)	19.5 km (24 db)
N552	45 km (25 db)			5.4 km (20 db)	
D701	45 km (25 db)				
N901	DISTANCES SPECIFIED IN THE BACK OF THE DATA SHEET				

The recommended link distances are calculated for typical values of fibre already installed according to the following parameters:

Type of fibre	Multimode		Singlemode	
Work wavelength (nm)	850	1.310	1.310	1.550
Attenuation of the cable already installed (dB/Km)	3	1	0.4	0.25
Elementary length of the installed cable (Km)				2
Loss in fusion splices (dB)				0.1
Loss in connectors (dB)				0.5
Number of connections in optical patch-panel				2
Reserve for unforeseeable events (cable breaking, introduction of new services, etc)				10 %

VERY IMPORTANT: THIS DISTANCES ARE JUST ORIENTATIVE. THE TRANSMISSION DISTANCES ARE LIMITED BY LOSSES OF THE FIBER OPTIC AND ANY ADDITIONAL LOSS CAUSED BY CONNECTORS, SPLICES, PATCH PANNELS, BANDWIDTH...

FOR FIBERS 50/125 PLEASE SEE HOW MANY dB MUST BE DISCOUNTED FROM THE TOTAL OPTICAL BUDGET.