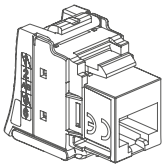
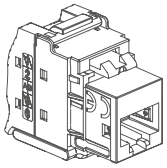
128, av. du Maréchal-de-Lattre-de-Tassigny - 87045 LIMOGES Cedex
Tel: +33(0)5 55 06 87 87
www.legrandgroup.com

Linkeo C Series RJ45 connectors and panel to be equipped

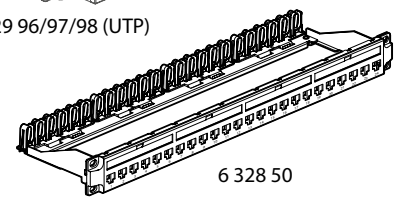
Cat.No(s): 6 329 95/96/97/98 - 6 328 50/51



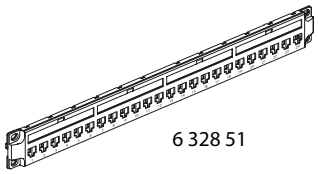
6 329 96/97/98 (UTP)



6 329 95 (STP)



6 328 50



6 328 51

CONTENTS **Page**

1. GENERAL CHARACTERISTICS

Panel system to be equipped with up to 24 Keystone RJ45 connectors.

- Keystone RJ45 connectors for toolless assembly (Cat 5e UTP, Cat 6 UTP, Cat 6_A UTP/STP).

- 19" panel - 1 U - Black (RAL 9017).

Universal mounting in all racks or cabinets with automatic earthing on unpainted uprights. Painted uprights can be connected to earth with a cord and a screw connection.

Locating pin for pre-positioning the panel.

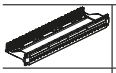
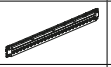
Equipped or not with rear cable guide to hold cable during maintenance

Supplied with sheet of labels for marking connectors.

Each connector can be removed individually.

100% compatible with the Keystone format as defined in IEC 60603-7. This guarantees interoperability with all other market products compliant with the standard.

- Each RJ45 connector is suitable for flush-mounting and surface-mounting boxes of minimum depth of 40mm.

	Description	Cat.No	Weight (g)
	Panel to be equipped with up to 24 RJ45	6 328 50	536
	Panel without rear cable guide, to be equipped with up to 24 RJ45	6 328 51	250
	Set of 24 Cat 5e UTP RJ45 connectors	6 329 98	228
	Set of 24 Cat 6 UTP RJ45 connectors	6 329 97	228
	Set of Cat 6_A UTP RJ45 connectors	6 329 96*	498
	Set of 24 Cat 6_A STP RJ45 connectors	6 329 95*	693

* Permanent link certified only

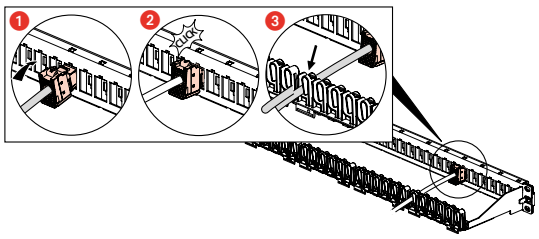
2. POSITIONING

Connectors are connected at the rear without a special tool.

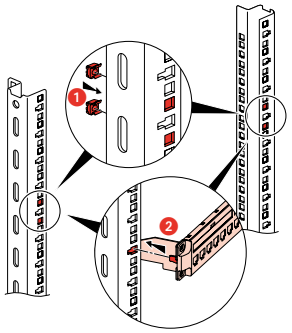
- Connectors clip onto the panel individually

No need to fix with a cable tie: the cable stays in the cable guide on the panel.

Connector mounting



Panel mounting

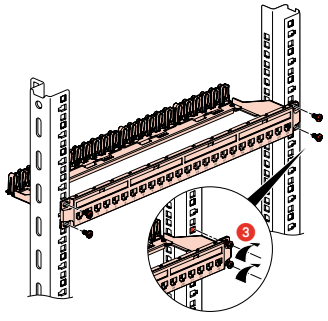


Ingenious: the system allows the panel to be pre-positioned and held in place without the need for screws.

Once inserted in the uprights, it holds firmly in place.

Now you can easily assemble the panels.

Screw each panel in place once everything is connected up correctly.



3. INSTALLATION

Maximum length of Permanent Link based on architecture

	Maximum cord length[1]	Maximum Permanent Link	Total Channel
2 Connector Channel	10m	89m	99m
3 Connector Channel [2]	10m	88m	98m
4 Connector Channel [2]	10m	87m	97m

[1] = sum of 2 cords

[2] Not applicable to LK61 and LK63.

Note: calculations based on ISO/IEC 11801. Legrand products support the 100m 2-connector channel, confirmed by laboratory testing

4. PANEL TECHNICAL CHARACTERISTICS

■ 4.1 Material characteristics

- Galvanised sheet steel
- Steel (screw)
- Polycarbonate
- ABS for the rear cable guide of 6 328 50

■ 4.2 Electrical characteristics

Panel automatically earthed to the uprights via an unpainted contact area.

Earthing lug on the panel if an additional earth is needed.

■ 4.3 Mechanical characteristics

Fixing to the uprights with M6 screws and 9.5x9.5 cage nuts (supplied).
IK03
IP20

■ 4.4 Climate characteristics

Operating temperatures: -10°C to +60°C
Storage temperatures: -10°C to +70°C
Humidity: 5% to 85% (non-condensing)

5. CONNECTOR TECHNICAL CHARACTERISTICS

■ 5.1 Material characteristics

- Contacts: Bronze, gold/nickel coating, minimum gold thickness 0.8 µm
- Nickel/bronze
- ABS
- Polycarbonate
- Shielding (STP version): ZAMAK metal alloy, copper/nickel coating

■ 5.2 Electrical characteristics

Breakdown voltage: 1000 V
Contact resistance: 20 mΩ
Insulation resistance: 500 MΩ at 100 VDC
Compatible with "PoE" remote powering

■ 5.3 Mechanical characteristics

Maximum number of connections/disconnections operations :
- AWG 23 to AWG 26 : compliant with ISO/ IEC 11801 IEC 60352-4 (20 terminations)
- AWG 22 : compliant with 5 re-terminations*

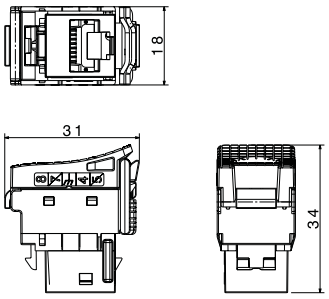
* with cables 0 328 52 and 0 328 77.
With any other AWG 22 cable not qualified by Legrand, the IDC is compliant with 2 re-terminations.
Endurance: 2500 movements (plug insertion/withdrawal) according to ISO/IEC 11801-1 PL2.
IK03
IP20

■ 5.4 Climate characteristics

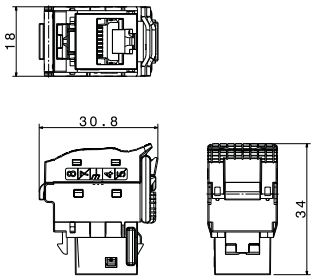
Operating temperatures: -10°C to +60°C
Storage temperatures: -10°C to +70°C
Humidity: 5% to 85% (non-condensing)

6. DIMENSIONS

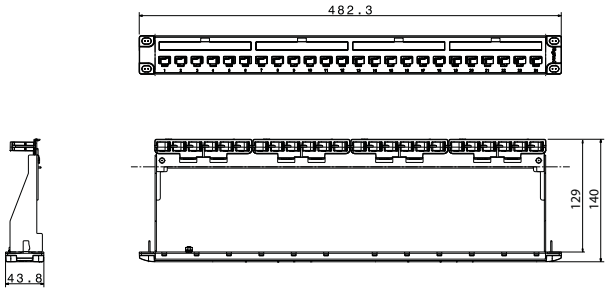
UTP connector dimensions



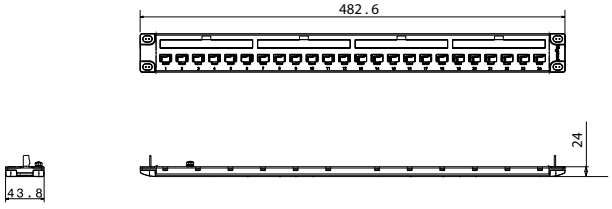
STP connector dimensions



Panel dimensions - 6 328 50



Panel dimensions - 6 328 51

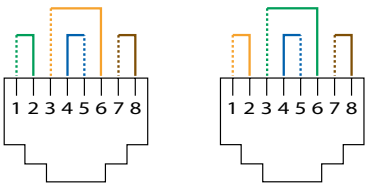


7. TYPICAL RJ45 CONNECTION

Connectors accept the following plug types:
RJ11 (4 contacts), RJ12 (6 contacts), RJ45 (9 contacts).
Connectors accept the following cable types:

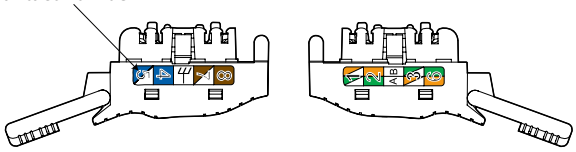
Connector type	Cable type
UTP	UTP, U/UTP
FTP	FTP, STP, F/UTP, U/FTP, F/FTP, S/FTP, SF/UTP, SF/FTP

T568 A and B dual colour code:
- UTP (8 contacts)
- STP (9 contacts)



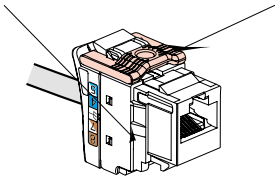
T568 A **T568 B**

Colour code and contact number



Identification number

Colour code category:



Identification number

Category	Lock colour	UTP	STP
Cat 5e	White	LK01	LK03
Cat 6	Light Grey	LK51	LK53
Cat 6_A	Charcoal grey	LK61	LK63

Permissible conductors:

- Solid/Stranded: 0.4 to 0.642 mm, AWG 26 to 22
- Polyethylene conductor insulation: Ø 0.85 to 1.7 mm on insulation

Number of wires to be connected per connection: 1

RJ45 connectors are equipped with a locking tab. They do not require a special tool and can be re-terminated if a mistake is made.

8. STANDARDS

ISO/IEC 11801 series: International standard for generic cabling systems
ANSI/TIA 568 series: North American standard for generic cabling systems
EN 50173 series: European standard for generic cabling systems
IEC 60603-7 series: International specification standard for plugs and bases

Connectors have earned the UL Listed Mark and are compliant to UL 1863.

Connectors comply with the requirements of remote powering applications
IEEE 802.3af, IEEE 802.3at, IEEE 802.3bt: "Power over Ethernet" Types 1 to 4, up to 90 W.

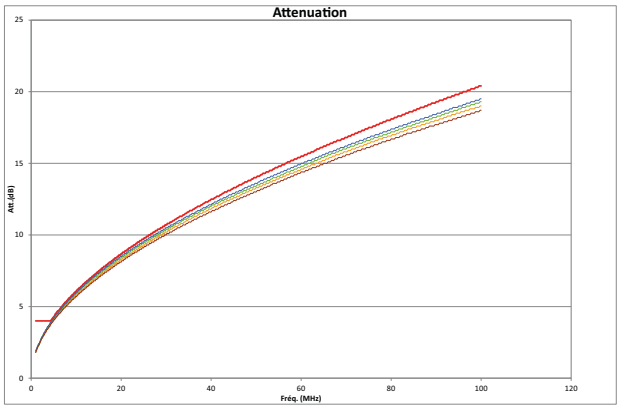
9. PERFORMANCES

■ 9.1 Permanent link performances with Cat 5e UTP connector and Cat 5e U/UTP cable

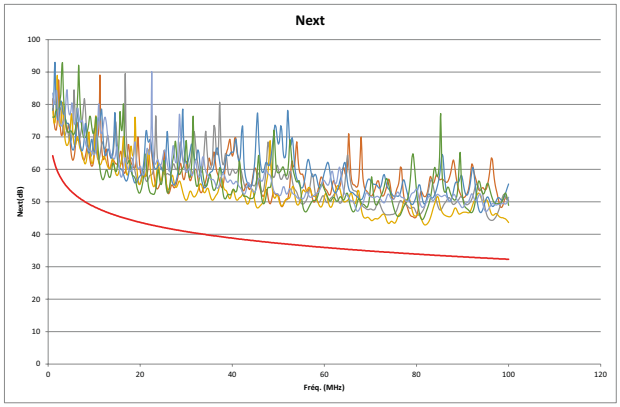
The red line represents the limit line of standard.

Return loss

Attenuation



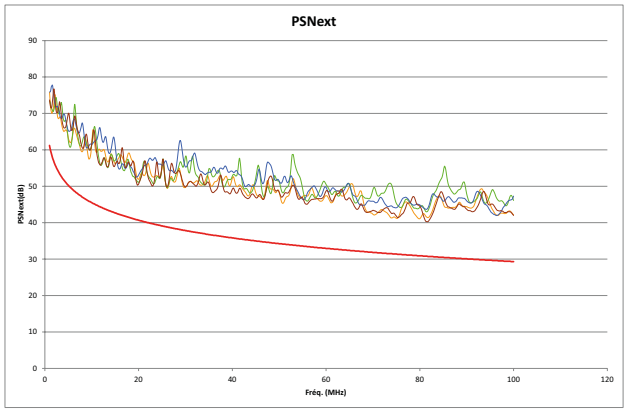
NEXT (Near end Crosstalk Attenuation)



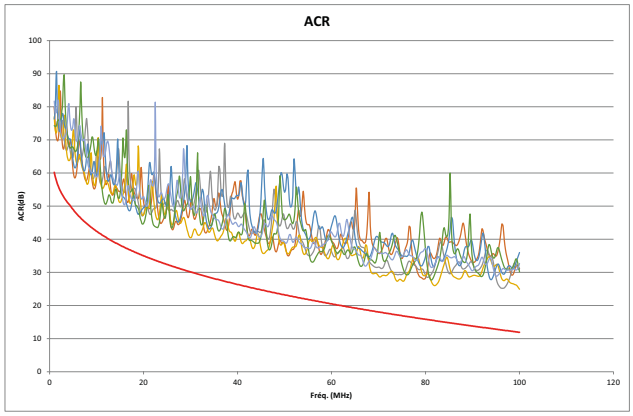
9. PERFORMANCES *(continued)*

■ 9.1 Permanent link performances with Cat 5e UTP connector and Cat 5e U/UTP cable *(continued)*

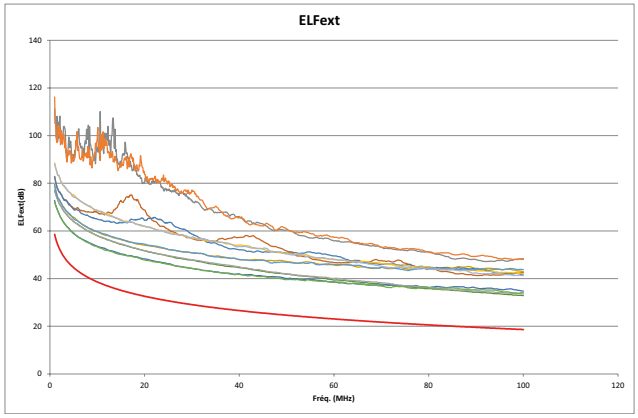
PS NEXT (Power Sum NEXT)



ACR -N



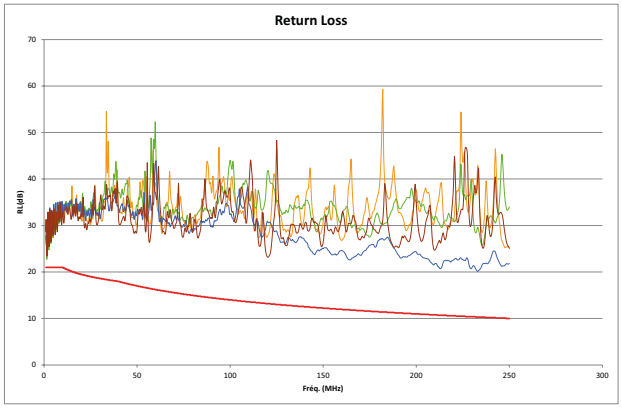
ACR-F



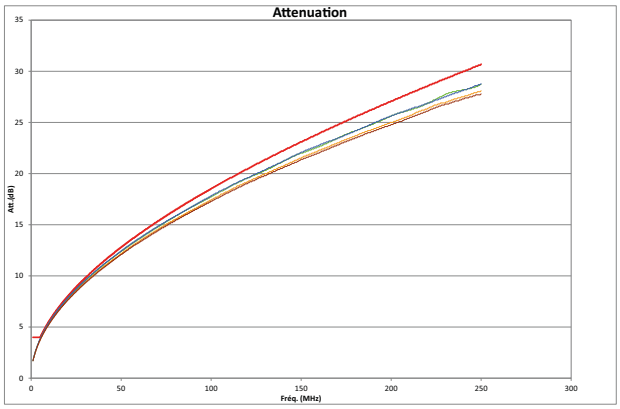
■ 9.2 Permanent link performances with Cat 6 UTP connector and Cat 6 U/UTP cable

The red line represents the limit line of standard.

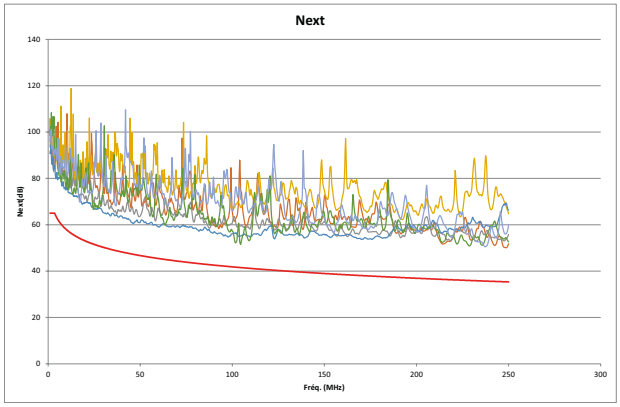
Return loss



Attenuation



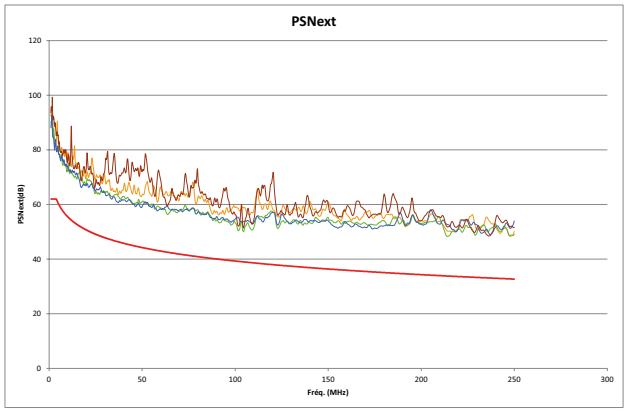
NEXT (Near end Crosstalk Attenuation)



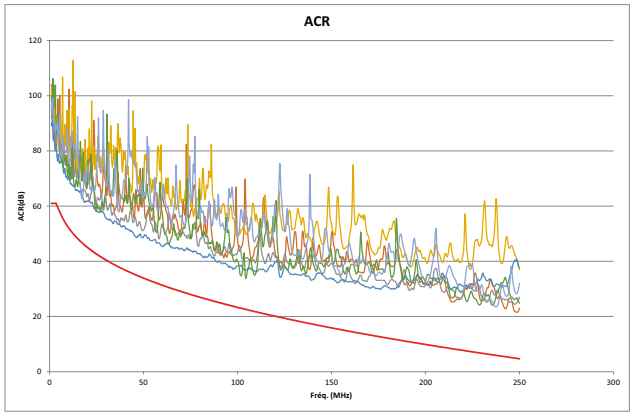
9. PERFORMANCES *(continued)*

■ 9.2 Permanent link performances with Cat 6 UTP connector and Cat 6 U/UTP cable *(continued)*

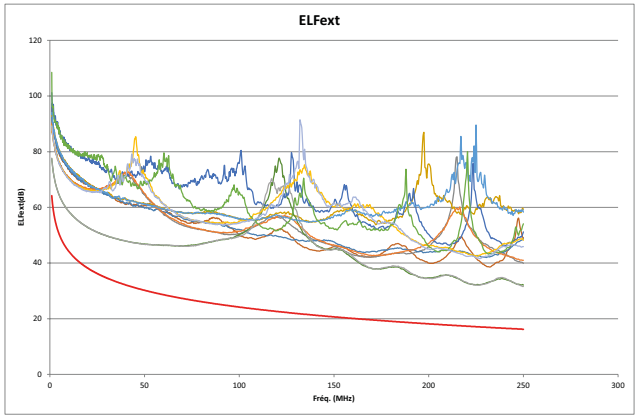
PS NEXT (Power Sum NEXT)



ACR -N



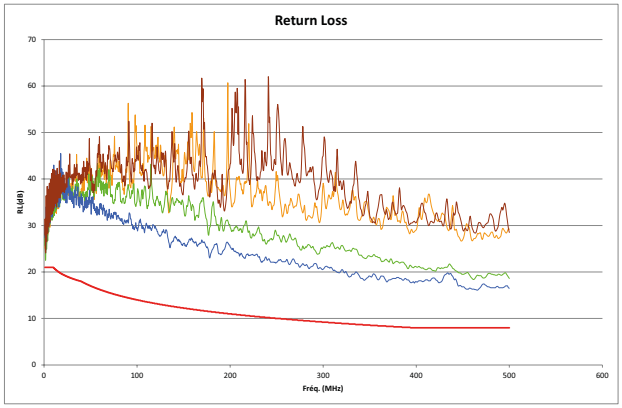
ACR-F



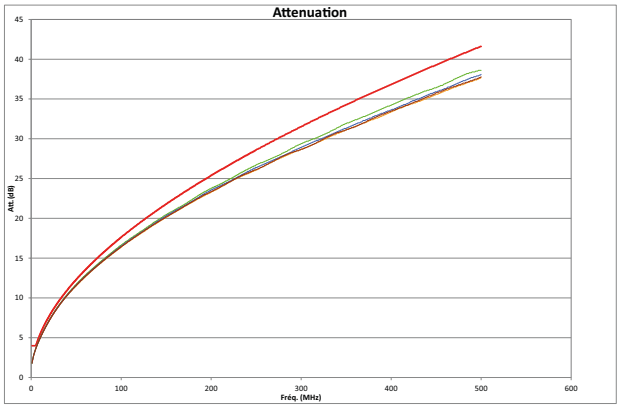
■ 9.3 Permanent link performances with Cat 6_A STP connector and Cat 6_A U/FTP cable

The red line represents the limit line of standard.

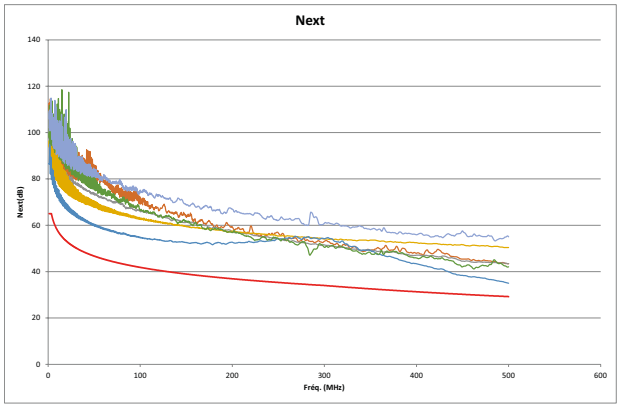
Return loss



Attenuation



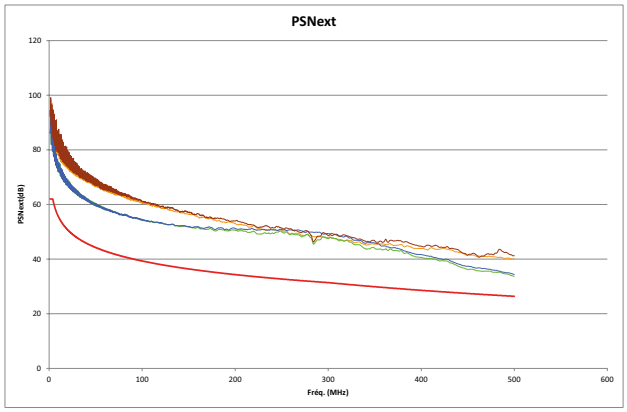
NEXT (Near end Crosstalk Attenuation)



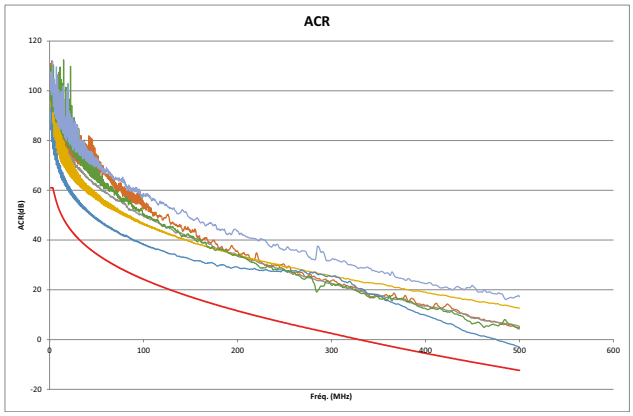
9. PERFORMANCES *(continued)*

■ 9.3 Permanent link performances with Cat 6_A STP connector and Cat 6_A U/FTP cable *(continued)*

PS NEXT (Power Sum NEXT)



ACR -N



ACR-F