



## JetLan5e+

JetLan is the only structured cabling system that includes all the passive components required for the installation or adaptation of your data network, as we include all the different types of high performance cables, the associated components and the tools needed for its installation. They all satisfy high quality levels, above the last Specifications and the industry requirements, and constitute a perfect integrated system. Our leadership in the American market during the last years results from the application of advanced technologies, which have been transferred to our production at the Morelena plant, in Portugal.

JetLan5e+ is our structured cabling solution for Enhanced Category 5 (Cat 5e), and it should be noted that the transmission quality obtained in a link with our system is above the requirements for this Category. This difference is reflected in the certificates from independent laboratories.

This system offers excellent data transmission characteristics, with values of attenuation and other parameters at 200 MHz much above the cables available in the market for this Category.

JetLan5e+ includes the largest range of components in the market:

- pair cables, unscreened (UTP) or screened (FTP), with different types of sheath (PVC, LSZH) and according to IEC 60332-1 or 60332-3-24 (Category C) Specifications.
- 19 " patchpanels unscreened or screened
- patchcords
- data system jacks, unscreened or screened
- other components and tools.

All JetLan 5e+ components surpass the Standards referring to Category 5 Enhanced (ISO/IEC 11801, EN 50173 and ANSI/TIA/EIA 568A-5), prepared by Standardisation Committees where General Cable participates in the work and research groups aiming at improving the quality of LAN networks.

# Jetlan5e+

## UTP Cat 5e cable (200 MHz) (PVC sheath)



**DESCRIPTION:** These cables offer excellent transmission characteristics, above the requirements for Category 5 Enhanced, with transmission quality much above other cables in the market for this category. They have a PVC sheath.

### CONSTRUCTION

Conductor	24 AWG (0,51 mm) solid bare annealed Copper
Insulation	Polyolefin
Pairing	Varying short pair lay-length (4 pairs)
Sheath	Grey PVC

### APPLICATIONS

- 10BASE-T (IEEE 802.3)
- 4/16 Mbps Token Ring (IEEE 802.5)
- 100BASE-VG-AnyLAN
- 100 Mbps TP-PMD (ANSI X3T9.5)
- 100BASE-T (IEEE 802.3)
- 55/155 Mbps ATM
- 1000BASE-T (Gigabit Ethernet)

### COMPLIANCES

IEC 60332-1, UNE 50265-2-1 (flame retardant cable)  
ANSI/TIA/EIA 568-B.2 (Category 5e)  
ISO/IEC 11801, IEC 61156-5  
EN 50173, EN 50288

### CERTIFICATION

EC Verified (DELTA)

### PACKING

- Pull-Pac boxes of 305 meters (1000 ft)
- Spools of 500 and 1000 meters (1640 and 3279 ft)

### COLOUR CODE

Pairs	Colour combination
1	white □ blue □ blue □ blue
2	white □ orange □ orange □ orange
3	white □ green □ green □ green
4	white □ brown □ brown □ brown

### ELECTRICAL AND CONSTRUCTIVE VALUES

DC resistance (max) Ohm/100m(328 ft) @ 20°C		8,90
Mutual capacitance (max) nF/100m(328 ft) @ 1kHz		5,60
Nominal velocity of propagation NVP (% speed of light)		68
Characteristic impedance (Ohm)		(min-max) 87-117
Value at	772 kHz 1.0-200 MHz	85-115
Return Loss (RL) dB (min)		20+5 log(f) 25
Value at	1.0 - 10 MHz 10 - 20 MHz 20 - 100 MHz	25-7 log(f/20)
Propagation Delay (max) (ns @ 10 MHz)		518
Delay skew (max) (ns/100 m)		45
External diameter (mm)		5,2
Weight (kg/km)		31,2
Minimum bending radius (mm)		20,6
Installation temperature (°C)		- 20 / +50
Operating temperature (°C)		- 20 / +60
Calorific value (MJ/m)		0,324

Frequency MHz	Attenuation Max dB/100m	NEXT dB/100m (min)	PS-NEXT dB/100m (min)	PS-ACR dB/100m (min)	ACR dB/100m (min)
0,772	1,7	87,1	83,9	82,2	85,4
1	1,9	85,1	81,9	80,0	83,2
4	3,8	74,4	71,6	67,8	70,6
8	5,4	69,1	66,4	61,0	63,7
10	6,1	67,4	64,7	58,6	61,3
16	7,7	63,8	61,2	53,5	56,1
25	9,7	60,3	57,9	48,2	50,6
31,25	10,9	58,6	56,2	45,3	47,7
62,5	15,6	53,3	51,0	35,4	37,7
100	19,9	49,7	47,5	27,6	29,8
155	25,1	46,3	44,2	19,1	21,2
200	28,7	44,3	42,3	13,6	15,6

### ORDERING INFORMATION

Code	Pairs/AWG	Sheath	Packing
529004CC4P	4/24	PVC, Grey	Pull-Pac boxes 305 m
529104CC4P	4/24	PVC, Grey	Spools 1.000 m
529104CC4PQ	4/24	PVC, Grey	Spools 500 m



# Jetlan5e+

## UTP Cat 5e cable (200 MHz) (LSZH sheath, acc. IEC 60332-1 and IEC 60332-3-24 specifications)



**DESCRIPTION:** These cables offer excellent transmission characteristics, above the requirements for Enhanced Category 5, with transmission quality much above other cables in the market for this category. They have a LSZH external sheath.

### CONSTRUCTION

Conductor	24 AWG (0,51 mm) solid bare annealed Copper
Insulation	Polyolefin
Pairing	Varying short pair lay-length (4 pairs)
Sheath	Type 332-1: Grey LSZH material, cables comply with IEC 60332-1 Type Exzhellent: Green LSZH material, cables comply with IEC 60332-3-24

### APPLICATIONS

- 10BASE-T (IEEE 802.3)
- 4/16 Mbps Token Ring (IEEE 802.5)
- 100BASE-VG-AnyLAN
- 100 Mbps TP-PMD (ANSI X3T9.5)
- 100BASE-T (IEEE 802.3)
- 55/155 Mbps ATM
- 1000BASE-T (Gigabit Ethernet)

### COMPLIANCES

ANSI/TIA/EIA 568-B.2 (Category 5e)  
ISO/IEC 11801, IEC 61156-5  
EN 50173, EN 50288  
IEC 60332-1 and EN 50265-2-1 (Flame retardancy)  
IEC 61034 and EN 50268 (Smoke opacity)  
IEC 50274 and EN 50267-2-1 (Halogen content)  
IEC 60332-3-24 and EN 20266-2-4 (Fire retardancy) - Exzhellent type only

### PACKING

- Pull-Pac boxes of 305 meters (1000 ft)
- Spools of 500 and 1000 meters (1640 and 3279 ft)

### COLOUR CODE

Pairs	Colour combination
1	white □ blue ■ blue ■ blue
2	white □ orange ■ orange ■ orange
3	white □ green ■ green ■ green
4	white □ brown ■ brown ■ brown

### ELECTRICAL AND CONSTRUCTIVE VALUES

DC resistance (max)	Ohm/100m(328 ft) @ 20°C	8,90
Mutual capacitance (nominal)	nF/100m(328 ft) @ 1kHz	4,59
Nominal velocity of propagation NVP (% speed of light)		68
Characteristic impedance (Ohm) Value at	772 kHz 1.0-200 MHz	(min-max) 87-117 85-115
Return Loss (RL) dB (min) Value at	1.0 - 10 MHz 10 - 20 MHz 20 - 100 MHz	20+5log(f) 25 25-7log(f/20)
Propagation Delay (max) (ns @ 10 MHz)		518
Delay skew (max) (ns/100 m)		45
External diameter (mm)		5,2 (Type 332-1) 6,2 (Type Exzhellent)
Weight (kg/km)		31,2 (Type 332-1) 46,4 (Type Exzhellent)
Minimum bending radius		20,6 mm (Type 332-1) 24,9 mm (Type Exzhellent)
Installation temperature (°C)		- 20 / + 50
Operating temperature (°C)		- 20 / + 60
Calorific value ( MJ/m)		0,498

Frequency MHz	Attenuation Max dB/100m	NEXT dB/100m (min)	PS-NEXT dB/100m (min)	PS-ACR dB/100m (min)	ACR dB/100m (min)
0,772	1,7	87,1	83,9	82,2	85,4
1	1,9	85,1	81,9	80,0	83,2
4	3,8	74,4	71,6	67,8	70,6
8	5,4	69,1	66,4	61,0	63,7
10	6,1	67,4	64,7	58,6	61,3
16	7,7	63,8	61,2	53,5	56,1
25	9,7	60,3	57,9	48,2	50,6
31,25	10,9	58,6	56,2	45,3	47,7
62,5	15,6	53,3	51,0	35,4	37,7
100	19,9	49,7	47,5	27,6	29,8
155	25,1	46,3	44,2	19,1	21,2
200	28,7	44,3	42,3	13,6	15,6

### ORDERING INFORMATION

Code	Pairs/AWG	Sheath	Packing
530004CC4P	4/24	LSZH material, Grey	Pull-Pac boxes 305 m
530104CC4P	4/24	LSZH, Grey	Spools 1.000 m
530104CC4PQ	4/24	LSZH, Grey	Spools 500 m
531104CC4P	4/24	Special LSZH material, Green	Spools 500 / 1.000 m



# Jetlan5e+

## UTP Cat 5e Duplex cable (200 MHz) (PVC or LSZH sheath)



**DESCRIPTION:** These cables consist of two UTP cores, parallel, with a common sheath. They provide excellent transmission characteristics that go beyond the Enhanced Category 5 (Cat 5e) requirements, with performance values at 200 MHz much higher than other cables of this category available in the market. They may be supplied with PVC or LSZH sheaths.

### CONSTRUCTION

Conductor	24 AWG (0,51 mm) solid bare annealed Copper
Insulation	Polyolefin
Pairing	2 x 4 pairs with short lay-lengths
Sheath	Standard type: PVC, Grey LSZH type: Thermoplastic LSZH material, Grey

### APPLICATIONS

- 10BASE-T (IEEE 802.3)
- 4/16 Mbps Token Ring (IEEE 802.5)
- 100BASE-VG-AnyLAN
- 100 Mbps TP-PMD (ANSI X3T9.5)
- 100BASE-T (IEEE 802.3)
- 55/155 Mbps ATM
- 1000BASE-T (Gigabit Ethernet)

### COMPLIANCES

ANSI/TIA/EIA 568-B.2 (Category 5e)  
ISO/IEC 11801, IEC 61156-5  
EN 50173, EN 50288  
IEC 60332-1 and EN 50265-2-1 (flame retardant cable)  
IEC 61034 and EN 50268 (Smoke density) - only LSZH type  
IEC 50274 and EN 50267-2-1 (Halogen content) - only LSZH type

### CERTIFICATION

EC Verified (DELTA)

### PACKING

- Spools of 1000 meters

### COLOUR CODE

Pairs	Colour combination
1	white  blue  blue
2	white  orange  orange
3	white  green  green
4	white  brown  brown

### ELECTRICAL AND CONSTRUCTIVE VALUES

DC resistance (max) Ohm/100m(328 ft) @ 20°C	8,90	
Mutual capacitance (nominal) nF/100m(328 ft) @ 1kHz	5,60	
Nominal velocity of propagation NVP (% speed of light)	68	
Characteristic impedance (Ohm) Value at	772 kHz 1.0-200 MHz	(min-max) 87-117 85-115
Return Loss (RL) dB (min) Value at	1.0 - 10 MHz 10 - 20 MHz 20 - 100 MHz	20+5log(f) 25 25-7log(f/20)
Propagation Delay (max) (ns @ 10 MHz)	518	
Delay skew (max) (ns/100 m)	45	
External diameter (mm)	5,2 x 11	
Weight (kg/km)	63	
Minimum bending radius (mm)	20,8	
Installation temperature (°C)	- 20 / + 50	
Operating temperature (°C)	- 20 / + 60	
Calorific value	0,648 MJ/m (PVC) 0,996 (zh)	

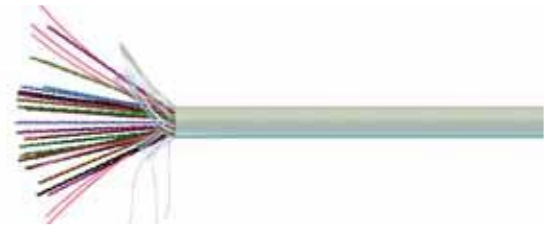
Frequency MHz	Attenuation Max dB/100m	NEXT dB/100m (min)	PS-NEXT dB/100m (min)	PS-ACR dB/100m (min)	ACR dB/100m (min)
0,772	1,7	87,1	83,9	82,2	85,4
1	1,9	85,1	81,9	80,0	83,2
4	3,8	74,4	71,6	67,8	70,6
8	5,4	69,1	66,4	61,0	63,7
10	6,1	67,4	64,7	58,6	61,3
16	7,7	63,8	61,2	53,5	56,1
25	9,7	60,3	57,9	48,2	50,6
31,25	10,9	58,6	56,2	45,3	47,7
62,5	15,6	53,3	51,0	35,4	37,7
100	19,9	49,7	47,5	27,6	29,8
155	25,1	46,3	44,2	19,1	21,2
200	28,7	44,3	42,3	13,6	15,6

### ORDERING INFORMATION

Code	Pairs/AWG	Sheath	Packing
529808CC4P	8/24	Grey PVC	Spools 1000 mts
530808CC4P	8/24	Green LSZH material	Spools 1000 mts

# Jetlan5e+

## Category 5e UTP 25 pairs solid cable with PVC or LSZH sheath (IEC 60332-1)



**DESCRIPTION:** These pair cables present Gigabit Ethernet transmission characteristics, with properties at 100 MHz beyond the Enhanced Category 5 (Cat 5e) requirements.

### CONSTRUCTION

Conductor	24 AWG (0,51 mm) solid bare annealed Copper
Insulation	Polyolefin
Pairing	25 pairs with varying short lay lengths, stranded
Sheath	Standard type: Grey PVC LSZH type: Grey thermoplastic LSZH material

### APPLICATIONS

- 10BASE-T (IEEE 802.3)
- 4/16 Mbps Token Ring (IEEE 802.5)
- 100BASE-VG-AnyLAN
- 100 Mbps TP-PMD (ANSI X3T9.5)
- 100BASE-T (IEEE 802.3)
- 55/155 Mbps ATM
- 1000 BASE-T (Gigabit Ethernet)

### COMPLIANCES

ANSI/TIA/EIA 568-B.2 (Category 5e)  
ISO/IEC 11801, IEC 61156-5  
EN 50173, EN 50288  
IEC 60332-1 and EN 50265-2-1 (flame retardant cable)  
IEC 61034 and EN 50268 (Smoke density) - only for LSZH type  
IEC 50274 and EN 50267-2-1 (Halogen content) - only for LSZH type

### PACKING

- 500m and 1000 m drums

### ELECTRICAL AND CONSTRUCTIVE VALUES

DC resistance (max) Ohm/100m(328 ft) @ 20°C	9,38
Mutual capacitance (nominal) nF/100m(328 ft) @ 1kHz	4,59
Nominal velocity of propagation NVP (% speed of light)	70
Characteristic impedance (Ohm) Value at 1-100 MHz	85-115
Propagation Delay (max) (ns @ 10 MHz)	518
Delay skew (max) (ns/100 m)	45
External diameter (mm)	15
Weight (kg/km)	213,7

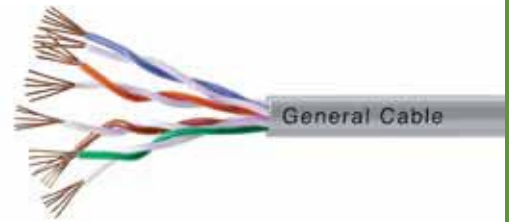
Frequen. MHz	Attenuat. Max. dB/100m	NEXT dB/100m (min)	PS-NEXT dB/100m (min)	ELFEXT dB/100m (min)	PS-ELFEXT dB/100m (min)	Return loss dB/100m (min)
0,772	1,8	67,0	63,7	66,0	63,0	-
1	2,0	65,3	62,3	63,8	60,8	20,0
4	4,1	56,3	53,3	51,7	48,7	23,0
8	5,8	51,3	48,3	45,7	42,7	24,5
10	6,5	50,3	47,3	43,8	40,8	25,0
16	8,2	47,3	44,4	39,7	36,7	25,0
20	9,3	45,3	42,8	37,7	34,7	25,0
25	10,4	44,3	41,3	35,8	32,8	24,3
31,25	11,7	42,9	39,9	33,9	30,9	23,6
62,5	17,0	38,4	35,4	27,8	24,8	21,5
100	22,0	35,3	32,3	23,8	20,8	20,1

### ORDERING INFORMATION

Code	Pairs/AWG	Sheath	Packing
668625CC4P	25/24	Grey PVC	Drums
668725CC4P	25/24	Green LSZH	Drums

# Jetlan5e+

## Category 5e (200 MHz) UTP patchcable with PVC or LSZH sheath (IEC 60332-1)



**DESCRIPTION:** These cables, designed for internal installation, are used in the manufacture of patchcords. These are installed within the racks and in the connection of equipments to the network. They provide excellent data transmission characteristics, beyond the Enhanced category 5 (Cat 5e) requirements, with performance values at 200 MHz much higher than other cables of this category available in the market. They may have a PVC (standard type) or LSZH sheath (supplied on special demand).

### CONSTRUCTION

Conductor	24 AWG (7 x 32 AWG), flexible bare Copper
Insulation	Polyolefin
Pairing	Varying short pair lay-length
Sheath	Standard type: Grey PVC LSZH type: Grey thermoplastic LSZH material

### APPLICATIONS

- 10BASE-T (IEEE 802.3)
- 4/16 Mbps Token Ring (IEEE 802.5)
- 100BASE-VG-AnyLAN
- 100 Mbps TP-PMD (ANSI X3T9.5)
- 100BASE-T (IEEE 802.3)
- 55/155 Mbps ATM
- 1000 BASE-T (Gigabit Ethernet)

### CERTIFICATION

EC Verified (DELTA)

### COMPLIANCES

ANSI/TIA/EIA 568-B.2 (Category 5e)  
ISO/IEC 11801, IEC 61156-5  
EN 50173, EN 50288  
IEC 60332-1 and EN 50265-2-1 (Flame retardant cable)  
IEC 61034 and EN 50268 (Smoke density) - only LSZH type  
IEC 50274 and EN 50267-2-1 (Halogen content) - only LSZH type

### PACKING

- 500 and 1000 metres spools

### COLOUR CODE

Pairs	Colour combination
1	white □ blue ■ blue ■ blue
2	white □ orange ■ orange ■ orange
3	white □ green ■ green ■ green
4	white □ brown ■ brown ■ brown

### ELECTRICAL AND CONSTRUCTIVE VALUES

DC resistance (max) Ohm/100m(328 ft) @ 20°C		8,90
Mutual capacitance (nominal) nF/100m(328 ft) @ 1kHz		5,60
Nominal velocity of propagation NVP (% speed of light)		68
Characteristic impedance (Ohm) Value at	772 kHz 1.0-200 MHz	(min-max) 87-117 85-115
Return Loss (RL) dB (min) Value at	1.0 - 10 MHz 10 - 20 MHz 20 - 100 MHz	20+5log(f) 25 25-7log(f/20)
Propagation Delay (max) (ns @ 10 MHz)		518
Delay skew (max) (ns/100 m)		45
External diameter (mm)		5,4
Weight (kg/km)		33
Minimum bending radius (mm)		22
Installation temperature (°C)		- 20 / + 50
Operating temperature (°C)		- 20 / + 60
Calorific value (MJ/m)		0,324 (PVC) 0,498 (LSZH)

Frequency MHz	Attenuation Max dB/100m	NEXT dB/100m (min)	PS-NEXT dB/100m (min)	ACR dB/100m (min)	PS-ACR dB/100m (min)
0,772	1,7	82,4	81,6	80,7	79,9
1	2,1	80,7	79,9	78,6	77,8
4	4,8	72,0	70,7	67,2	65,9
8	7,0	67,6	66,1	60,6	59,1
10	7,9	66,2	64,7	58,3	56,8
16	10,2	63,3	61,6	53,1	51,4
25	12,9	60,5	58,6	47,6	45,7
31,25	14,6	59,0	57,1	44,4	42,5
62,5	21,1	54,7	52,6	33,6	31,5
100	27,1	51,7	49,4	24,6	22,3
125	-	50,3	48,0	-	-
155	-	49,0	46,6	-	-
200	-	47,4	44,9	-	-

### ORDERING INFORMATION

Code	Pairs/AWG	Sheath	Packing
553004CC4P	4/24	Grey PVC	Spools 500 / 1.000 m
554004CC4P	4/24	Grey LSZH material	Spools 500 / 1.000 m



# Jetlan5e+

## Category 5e (200 MHz) FTP patchcable PVC or LSZH sheath



**DESCRIPTION:** These cables, designed for indoor applications, are used in the production of patchcords. These are installed within the racks and in the connection of equipments to the network. They provide excellent data transmission characteristics that go beyond the Enhanced Category 5 requirements, with performance values at 200 MHz much higher than other cables of this category available in the market. The screen minimises EMI radiation and susceptibility to outside noise. They are available with PVC (standard type) or LSZH sheath (available on special demand).

### CONSTRUCTION

Conductor	Conductor 24 AWG (7x32 AWG) flexible bare Copper
Insulation	Polyolefin
Pairing	Varying short pair lay-length
Screen	Aluminium / Polyester foil
Drain wire	24 AWG (0,51 mm) solid tinned Copper
Sheath	Standard type: Grey PVC LSZH type: Grey thermoplastic LSZH material

### APPLICATIONS

- 10BASE-T (IEEE 802.3)
- 4/16 Mbps Token Ring (IEEE 802.5)
- 100BASE-VG-AnyLAN
- 100 Mbps TP-PMD (ANSI X3T9.5)
- 100BASE-T (IEEE 802.3)
- 55/155 Mbps ATM
- 1000 BASE-T (Gigabit Ethernet)

### COMPLIANCES

ANSI/TIA/EIA 568-B.2 (Category 5e)  
ISO/IEC 11801, IEC 61156-5  
EN 50173, EN 50288  
IEC 60332-1 and EN 50265-2-1 (flame retardant cable)  
IEC 61034 and EN 50268 (smoke density) - only LSZH type  
IEC 50274 and EN 50267-2-1 (halogen content) - only LSZH type

### PACKING

- 500 and 1000 m spools

### COLOUR CODE

Pairs	Colour combination
1	white □ blue □ blue □ blue
2	white □ orange □ orange □ orange
3	white □ green □ green □ green
4	white □ brown □ brown □ brown

### ELECTRICAL AND CONSTRUCTIVE VALUES

DC resistance (max) Ohm/100m(328 ft) @ 20°C		8,90
Mutual capacitance (nominal) nF/100m(328 ft) @ 1kHz		5,60
Nominal velocity of propagation NVP (% speed of light)		68
Characteristic impedance (Ohm) Value at	772 kHz 1.0-200 MHz	(min-max) 87-117 85-115
Return Loss (RL) dB (min) Value at	1.0 - 10 MHz 10 - 20 MHz 20 - 100 MHz	20+5log(f) 25 25-7log(f/20)
Propagation Delay (max) (ns @ 10 MHz)		518
Delay skew (max) (ns/100 m)		45
External diameter (mm)		5,3
Weight (kg/km)		32 (PVC) 31 (LSZH)
Minimum bending radius (mm)		22
Operating temperature (°C)		- 20 / + 50
Calorific value (MJ/m)		0,30 (PVC) 0,486 (LSZH)

Frequency MHz	Attenuation Max dB/100m	NEXT dB/100m (min)	PS-NEXT dB/100m (min)	ACR dB/100m (min)	PS-ACR dB/100m (min)
0,772	1,7	82,4	81,6	80,7	79,9
1	2,1	80,7	79,9	78,6	77,8
4	4,8	72,0	70,7	67,2	65,9
8	7,0	67,6	66,1	60,6	59,1
10	7,9	66,2	64,7	58,3	56,8
16	10,2	63,3	61,6	53,1	51,4
25	12,9	60,5	58,6	47,6	45,7
31,25	14,6	59,0	57,1	44,4	42,5
62,5	21,1	54,7	52,6	33,6	31,5
100	27,1	51,7	49,4	24,6	22,3
125		50,3	48,0		
155		49,0	46,6		
200		47,4	44,9		

### ORDERING INFORMATION

Code	Pairs/AWG	Sheath	Packing
561104CC4P	4/24	Grey PVC	Spools 500 / 1.000 m
560004CC4P	4/24	Grey LSZH material	Spools 500 / 1.000 m



# Jetlan5e+

## Category 5e (200 MHz) FTP solid cable with PVC sheath



**DESCRIPTION:** These screened cables provide excellent transmission characteristics that go beyond the Enhanced category 5 (Cat 5e) requirements, with performance values at 200 MHz much higher than other cables of this category available in the market. The screen minimises EMI radiation and susceptibility to outside noise.

### CONSTRUCTION

Conductor	24 AWG (0,51 mm) solid bare annealed Copper
Insulation	Polyolefin
Pairing	Varying short pair lay-length
Screen	Aluminium / Polyester foil
Drain wire	24 AWG (0,51 mm) solid tinned annealed Copper
Sheath	Grey PVC

### APPLICATIONS

- 10BASE-T (IEEE 802.3)
- 4/16 Mbps Token Ring (IEEE 802.5)
- 100BASE-VG-AnyLAN
- 100 Mbps TP-PMD (ANSI X3T9.5)
- 100BASE-T (IEEE 802.3)
- 55/155 Mbps ATM
- 1000BASE-T (Gigabit Ethernet)

### COMPLIANCES

IEC 60332-1, UNE 50265-2-1 (flame retardant cable)  
ANSI/TIA/EIA 568-B.2 (Category 5e)  
ISO/IEC 11801, IEC 61156-5  
EN 50173, EN 50288

### CERTIFICATION

EC Verified (DELTA)

### PACKING

- Pull-Pac boxes with 305 m (1000 ft)
- 500 and 1000 m spools

### COLOUR CODE

Pairs	Colour combination
1	white □ blue □ blue
2	white □ orange □ orange
3	white □ green □ green
4	white □ brown □ brown

### ELECTRICAL AND CONSTRUCTIVE VALUES

DC resistance (max) Ohm/100m(328 ft) @ 20°C		8,90
Mutual capacitance (max) nF/100m(328 ft) @ 1kHz		5,60
Nominal velocity of propagation NVP (% speed of light)		68
Characteristic impedance (Ohm) Value at	772 kHz 1.0-200 MHz	(min-max) 87-117 85-115
Return Loss (RL) dB (min) Value at	1.0 - 10 MHz 10 - 20 MHz 20 - 100 MHz	20+5 log(f) 25 25-7 log(f/20)
Propagation Delay (max) (ns @ 10 MHz)		518
Delay skew (max) (ns/100 m)		45
External diameter (mm)		5,5
Weight (kg/km)		36
Minimum bending radius (mm)		22

Frequen. MHz	Attenuat. Max. dB/100m	NEXT dB/100m (min)	PS-NEXT dB/100m (min)	ELFEXT dB/100m (min)	PS-ELFEXT dB/100m (min)	ACR dB/100m (min)	PS-ACR dB/100m (min)
0,772	1,6	85,1	82,2	85,9	84,4	83,5	80,6
1	1,9	83,2	80,3	83,8	82,2	81,3	78,4
4	3,6	72,9	70,3	72,5	70,8	69,3	66,7
8	5,1	67,8	65,3	66,8	65,1	62,7	60,2
10	5,7	66,1	63,7	65	63,3	60,4	58
16	7,2	62,6	60,4	61,1	59,4	55,4	53,2
25	9,1	59,3	57,1	57,5	55,8	50,2	48
31,25	10,2	57,6	55,5	55,7	53,9	47,4	45,3
62,5	14,4	52,5	50,5	50	48,2	38,1	36,1
100	18,3	49	47,1	46,1	44,4	30,7	28,8
125	20,5	47,3	45,5	44,3	42,5	26,8	25
155	22,9	45,7	44	44	42,2	22,8	21,1
200	26	43,8	42,1	40,5	38,7	17,8	16,1

### ORDERING INFORMATION

Code	Pairs/AWG	Sheath	Packing
535004CC4P	4/24	Grey PVC	Pull-Pac Boxes 305 m
535204CC4P	4/24	PVC, Grey	Spools 1.000 m
535204CC4PQ	4/24	PVC, Grey	Spools 500 m





# Jetlan5e+

## FTP Cat 5e cable (200 MHz) (LSZH sheath, acc. IEC 60332-1 and IEC 60332-3-24 specifications)



**DESCRIPTION:** These screened cables provide excellent data transmission characteristics that go beyond the Enhanced Category 5 (Cat 5e) requirements, with performance values at 200 MHz much higher than other cables of this category available in the market. The screen minimises EMI radiation and susceptibility to outside noise.

### CONSTRUCTION

Conductor	24 AWG (0,51 mm) solid bare annealed Copper
Insulation	Polyolefin
Pairing	Varying short pair lay-length
Screen	Aluminium / Polyester foil
Drain wire	24 AWG (0,51 mm) solid tinned annealed Copper
Sheath	Type 332-1: Grey LSZH material, cables comply with IEC 60332-1 Type Exzhellent: Green LSZH material, cables comply with IEC 60332-3-24

### APPLICATIONS

- 10BASE-T (IEEE 802.3)
- 4/16 Mbps Token Ring (IEEE 802.5)
- 100BASE-VG-AnyLAN
- 100 Mbps TP-PMD (ANSI X3T9.5)
- 100BASE-T (IEEE 802.3)
- 55/155 Mbps ATM
- 1000BASE-T (Gigabit Ethernet)

### COMPLIANCES

ANSI/TIA/EIA 568-B.2 (Category 5e)  
ISO/IEC 11801, IEC 61156-5  
EN 50173, EN 50288  
IEC 60332-1 and EN 50265-2-1 (Flame retardant cable)  
IEC 61034 and EN 50268 (Smoke density)  
IEC 50274 and EN 50267-2-1 (Halogen content)  
IEC 60332-3-24 and EN 20266-2-4 (Fire retardant cable) - only Exzhellent type

### PACKING

- Pull-Pac boxes of 305 m (1000 ft)
- Spools of 500 and 1000 m

### COLOUR CODE

Pairs	Colour combination
1	white <span style="display:inline-block; width:10px; height:10px; background-color:blue; border:1px solid black;"></span> blue <span style="display:inline-block; width:10px; height:10px; background-color:blue; border:1px solid black;"></span> blue
2	white <span style="display:inline-block; width:10px; height:10px; background-color:orange; border:1px solid black;"></span> orange <span style="display:inline-block; width:10px; height:10px; background-color:orange; border:1px solid black;"></span> orange
3	white <span style="display:inline-block; width:10px; height:10px; background-color:green; border:1px solid black;"></span> green <span style="display:inline-block; width:10px; height:10px; background-color:green; border:1px solid black;"></span> green
4	white <span style="display:inline-block; width:10px; height:10px; background-color:brown; border:1px solid black;"></span> brown <span style="display:inline-block; width:10px; height:10px; background-color:brown; border:1px solid black;"></span> brown

### ELECTRICAL AND CONSTRUCTIVE VALUES

DC resistance (max) Ohm/100m(328 ft) @ 20°C		8,90
Mutual capacitance (nominal) nF/100m(328 ft) @ 1kHz		5,60
Nominal velocity of propagation NVP (% speed of light)		68
Characteristic impedance (Ohm) Value at	772 kHz 1.0-200 MHz	(min-max) 87-117 85-115
Return Loss (RL) dB (min) Value at	1.0 - 10 MHz 10 - 20 MHz 20 - 100 MHz	20+5 log(f) 25 25-7 log(f/20)
Propagation Delay (max) (ns @ 10 MHz)		518
Delay skew (max) (ns/100 m)		45
External diameter (mm)		5,5 (Type 332-1)
Weight (kg/km)		35,3 (Type 332-1)
Minimum bending radius		22 (Type 332-1)

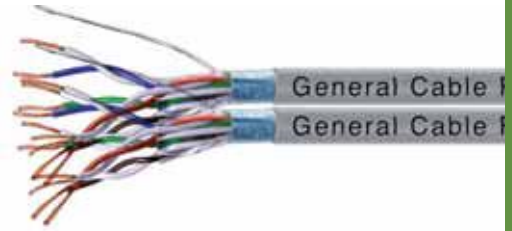
Frequen. MHz	Attenuat. Max. dB/100m	NEXT dB/100m (min)	PS-NEXT dB/100m (min)	ELFEXT dB/100m (min)	PS-ELFEXT dB/100m (min)	ACR dB/100m (min)	PS-ACR dB/100m (min)
0,772	1,6	85,1	82,2	85,9	84,4	83,5	80,6
1	1,9	83,2	80,3	83,8	82,2	81,3	78,4
4	3,6	72,9	70,3	72,5	70,8	69,3	66,7
8	5,1	67,8	65,3	66,8	65,1	62,7	60,2
10	5,7	66,1	63,7	65	63,3	60,4	58
16	7,2	62,6	60,4	61,1	59,4	55,4	53,2
25	9,1	59,3	57,1	57,5	55,8	50,2	48
31,25	10,2	57,6	55,5	55,7	53,9	47,4	45,3
62,5	14,4	52,5	50,5	50	48,2	38,1	36,1
100	18,3	49	47,1	46,1	44,4	30,7	28,8
125	20,5	47,3	45,5	44,3	42,5	26,8	25
155	22,9	45,7	44	44	42,2	22,8	21,1
200	26	43,8	42,1	40,5	38,7	17,8	16,1

### ORDERING INFORMATION

Code	Pairs/AWG	Sheath	Packing
536004CC4P	4/24	Grey LSZH material	Pull-Pac Boxes 305 m
536204CC4P	4/24	Grey LSZH material	Spools 1.000 m
536204CC4PQ	4/24	Grey LSZH material	Spools 500 m
537104CC4P	4/24	Green special LSZH material	Spools 500 / 1000 m

# Jetlan5e+

## Category 5e (200 MHz) Duplex FTP solid cable (PVC or LSZH sheath)



**DESCRIPTION:** These cables consist of two FTP cores, parallel, with a common sheath. These screened products provide excellent transmission characteristics that go beyond the Enhanced Category 5 (Cat 5e) requirements, with performance values at 200 MHz much higher than other cables of this category available in the market. The screen minimises EMI radiation and susceptibility to outside noise. They may be supplied with PVC or LSZH sheaths.

### CONSTRUCTION

Conductor	24 AWG (0,51 mm) solid bare annealed Copper
Insulation	Polyolefin
Pairing	2 x 4 pairs with varying short lay-lengths
Screen	Aluminium / Polyester foil
Drain wire	24 AWG (0,51 mm) solid tinned annealed Copper
Ripcord	Polyester, under the sheath
Sheath	Standard type: Grey PVC LSZH type: Grey thermoplastic LSZH material

### APPLICATIONS

- 10BASE-T (IEEE 802.3)
- 4/16 Mbps Token Ring (IEEE 802.5)
- 100BASE-VG-AnyLAN
- 100 Mbps TP-PMD (ANSI X3T9.5)
- 100BASE-T (IEEE 802.3)
- 55/155 Mbps ATM
- 1000BASE-T (Gigabit Ethernet)

### COMPLIANCES

ANSI/TIA/EIA 568-B.2 (Category 5e)  
ISO/IEC 11801, IEC 61156-5  
EN 50173, EN 50288  
IEC 60332-1 and EN 50265-2-1 (flame retardant cable)  
IEC 61034 and EN 50268 (smoke density) - only LSZH type  
IEC 50274 and EN 50267-2-1 (halogen emission) - only LSZH type

### PACKING

- Spools of 1000 m

### COLOUR CODE

Pairs	Colour combination
1	white <input type="checkbox"/> blue <input type="checkbox"/> blue <input type="checkbox"/> blue
2	white <input type="checkbox"/> orange <input type="checkbox"/> orange <input type="checkbox"/> orange
3	white <input type="checkbox"/> green <input type="checkbox"/> green <input type="checkbox"/> green
4	white <input type="checkbox"/> brown <input type="checkbox"/> brown <input type="checkbox"/> brown

### ELECTRICAL AND CONSTRUCTIVE VALUES

DC resistance (max) Ohm/100m(328 ft) @ 20°C		8,90
Mutual capacitance (nominal) nF/100m(328 ft) @ 1kHz		4,59
Nominal velocity of propagation NVP (% speed of light)		68
Characteristic impedance (Ohm) Value at	772 kHz 1.0-200 MHz	(min-max) 87-117 85-115
Return Loss (RL) dB (min) Value at	1.0 - 10 MHz 10 - 20 MHz 20 - 100 MHz	20+5 log(f) 25 25-7 log(f/20)
Propagation Delay (max) (ns @ 10 MHz)		518
Delay skew (max) (ns/100 m)		45
External diameter (mm)		6,1 x 12,1
Weight (kg/km)		86,4
Minimum bending radius (mm)		25

Frequency MHz	Attenuat. Max. dB/100m	NEXT dB/100m (min)	PS- NEXT dB/100m (min)	ELFEXT dB/100m (min)	PS- ELFEXT dB/100m (min)
0,772	1,7	84,1	82,2	85,9	84,4
1	2,0	82,4	80,3	83,8	82,2
4	3,8	72,8	70,3	72,5	70,8
8	5,2	68,1	65,3	66,8	65,1
10	5,9	66,6	63,7	65,0	63,3
16	7,5	63,3	60,4	61,1	59,4
25	9,5	60,3	57,1	57,5	55,8
31,25	10,8	58,7	55,5	55,7	53,9
62,5	15,5	54,0	50,5	50,0	48,2
100	20,5	50,7	47,1	46,1	44,4
155	24,5	47,7	44,0	44,0	42,2
200	28,6	46,0	42,1	40,5	38,7

### ORDERING INFORMATION

Code	Pairs/AWG	Sheath	Packing
535808CC4P	2x4/24	Grey PVC	Spools 1000 m
536008CC4P	2x4/24	Green LSZH material	Spools 1000 m

# JetLan5e+

## UTP and FTP patchpanels

The JetLan panels provide characteristics that go beyond the requirements of ANSI/TIA/EIA 568-B.2 and ISO/IEC 11801 Class E, based on a new printed circuit technology that increases transmission quality. All panels are supplied with installation instructions and accessories.

### APPLICATIONS

- 4/16 Mbps Token Ring
- 10/100/1000 Base-T Ethernet
- 155/622 Mbps ATM
- 100 Mbps TP-PMD
- 1000BASE-T (Gigabit Ethernet)

#### UTP

Code	Nr. of ports
CU5NP16NGP	16
CU5NP24NGP	24
CU5NP48NGP	48

#### FTP

Code	Nr. of ports
CF5NP16NGP	16
CF5NP24NGP	24

### CHARACTERISTICS

	UTP	FTP
Panel type	for 19" rack	for 19" rack
Panel height	1U (16&24) and 2U (48)	1U (16&24)
Depth	33,52 mm	129 mm
Colour	black	black
Connector type	RJ45	RJ49
Material	0,1 mils Ni with 0,05 mils Gold deposit	0,1 mils Ni with 0,05 mils Gold deposit
IDC	Displacement connectors	Displacement connectors
IDC contacts	Phosphor Bronze	Phosphor Bronze

The packaging is one panel per box and includes all the accessories and assembly instructions.



## Blank panel

19" 16- and 24-port 1U modular panel able to accommodate UTP type connectors. Keystone-type connectors are installed in black supports.

The references for the jacks to be used are:

CU5EJAKBLP	Jack Cat5e UTP
CU6PJAKBLP	Jack Cat6 UTP

### ORDERING INFORMATION

Code	Description	Colour	Packing
CU5PV16NGP	Panel with 16 vacant ports	Black	1
CU5PV24NGP	Panel with 24 vacant ports	Black	1



# Jetlan5e+

## UTP Jacks

Both the exclusive contact type and the advanced printed circuit technology contribute to provide a high performance level. When terminating with 110 tools, the insulating body acts as a protection, but it may also be used with other techniques.

### TESTS COMPLY WITH

- ETL Cat 5e (component)
- ANSI/TIA/EIA - 568B Cat 5e
- IEEE 802.3ab Gigabit Ethernet
- IEEE 802.3af (VoIP support)
- UL Listed 1863
- CSA Certified
- FCC part 68.5, subpart f
- IEC 603-7

### APPLICATIONS

- Voice (analog or digital)
- 155 / 622 Mbps ATM
- 4 / 16 Mbps Token Ring
- 10 / 100 / 1000 Base-T Ethernet
- 100 Mbps TP-PMD

### COMPLIANCES

ISO/IEC 11801 Class E  
ANSI/TIA/EIA 568B

### CHARACTERISTICS

Beryllium-Copper staggered contacts with a minimum of 50 micra of Gold plated on Nickel (FCC 47 Part 68.5)

IDC 110 contacts with 100 micra Lead-Tin 60/40 covering on Phosphor Bronze

Keystone type design

Easy to use universal installation system, with double labelling to avoid termination errors

### ORDERING INFORMATION

Code	Description	Packing
CU5EJAKBLP	5e type jack, 110 connectors, white	1 box / 25 units

Each 25 unit box includes a plastic tool to simplify the insertion process.



## FTP Jacks

Screened jack (FTP), Keystone Cat 5e design with IDC 110 type connectors. Packing includes connector, 2 protections and instructions sheet.

### APPLICATIONS

- Voice (analog or digital)
- 155 / 622 Mbps ATM
- 4 / 16 Mbps Token Ring
- 10 / 100 / 1000 Base-T Ethernet
- 100 Mbps TP-PMD

### CHARACTERISTICS

Cable connection	Top or back
Material	Impact resistant, self-extinguishable
Contacts	Phosphor Bronze
Screen	50 micra Gold plated on 100 micra Nickel
IDC	Type 110

### ORDERING INFORMATION

Code	Description	Packing
CF5NJAC99P	FTP 5e jack	1 box / 50 units



# JetLan5e+

## UTP and FTP patchcords

Our JetLan 5e+ patchcords include high-performance UTP and FTP patchcables, exclusive terminations and latest technology connecting techniques. All the assembling process is fully controlled and each cord is tested to avoid unbalance problems that may affect operation at higher frequencies.

### SPECIFICATIONS

The Cat 5e patch cords are 100% tested.

The patch cord is fitted in a manner compatible with T568B and T568A.

Manufacturing process with double-track plug.

### ORDERING INFORMATION

Code	Description	Packing (unit/box)
CU5EL05GRP	UTP patchcord 0,5 m PVC	10
CU5EL10GRP	UTP patchcord 1 m PVC	10
CU5EL15GRP	UTP patchcord 1,5 m PVC	10
CU5EL20GRP	UTP patchcord 2 m PVC	10
CU5EL25GRP	UTP patchcord 2,5 m PVC	10
CU5EL30GRP	UTP patchcord 3 m PVC	10
CU5EL40GRP	UTP patchcord 4 m PVC	5
CU5EL50GRP	UTP patchcord 5 m PVC	5
CF5EL05GRP	FTP patchcord 0,5 m PVC	10
CF5EL10GRP	FTP patchcord 1 m PVC	10
CF5EL15GRP	FTP patchcord 1,5 m PVC	10
CF5EL20GRP	FTP patchcord 2 m PVC	10
CF5EL25GRP	FTP patchcord 2,5 m PVC	10
CF5EL30GRP	FTP patchcord 3 m PVC	10
CF5EL40GRP	FTP patchcord 4 m PVC	5
CF5EL50GRP	FTP patchcord 5 m PVC	5
CU5HL05GRP	UTP patchcord 0,5 m LSZH	10
CU5HL10GRP	UTP patchcord 1 m LSZH	10
CU5HL15GRP	UTP patchcord 1,5 m LSZH	10
CU5HL20GRP	UTP patchcord 2 m LSZH	10
CU5HL25GRP	UTP patchcord 2,5 m LSZH	10
CU5HL30GRP	UTP patchcord 3 m LSZH	10
CU5HL40GRP	UTP patchcord 4 m LSZH	5
CU5HL50GRP	UTP patchcord 5 m LSZH	5
CF5HL05GRP	FTP patchcord 0,5 m LSZH	10
CF5HL10GRP	FTP patchcord 1 m LSZH	10
CF5HL15GRP	FTP patchcord 1,5 m LSZH	10
CF5HL20GRP	FTP patchcord 2 m LSZH	10
CF5HL25GRP	FTP patchcord 2,5 m LSZH	10
CF5HL30GRP	FTP patchcord 3 m LSZH	10
CF5HL40GRP	FTP patchcord 4 m LSZH	5
CF5HL50GRP	FTP patchcord 5 m LSZH	5

Grey sheath – other colours available on request.



## Accessories and tools

The JetLan 5e+ range of products includes a large number of accessories to improve cable management in cabinets and racks. It also includes all the tools required for the installation of structured cabling.

### ORDERING INFORMATION

#### ACCESSORIES

Code	Description	Packing (units/pack)
CAMP2X5BLP	Shuttered module 25x50	10
CWLG451BLP	Shuttered module 45x45	10
CAMC2X5BLP	Blank plate 25x50	10
CAPP8X8BLP	Faceplate 80x80 (with 50x50 aperture)	10
CMPAN01NGP	Blank panel 1U	5
CMPAN02NGP	Blank panel 2U	5
CMORG6LNGP	Blank management 1U - 5 rings	2
CMORGC1NGP	Blank management with cover 1U	1
CMORGC2NGP	Blank management with cover 2U	1
CMORGP1NGP	19" organizer 1U with 6 rings (Black or Grey)	2

#### CONNECTION TOOLS

Code	Description	Packing (units/pack)
CSPD11099P	Punch down tool with 110 blade	1
CSBL11099P	110 blade	1
CSBLLSA99P	LSA blade	1

