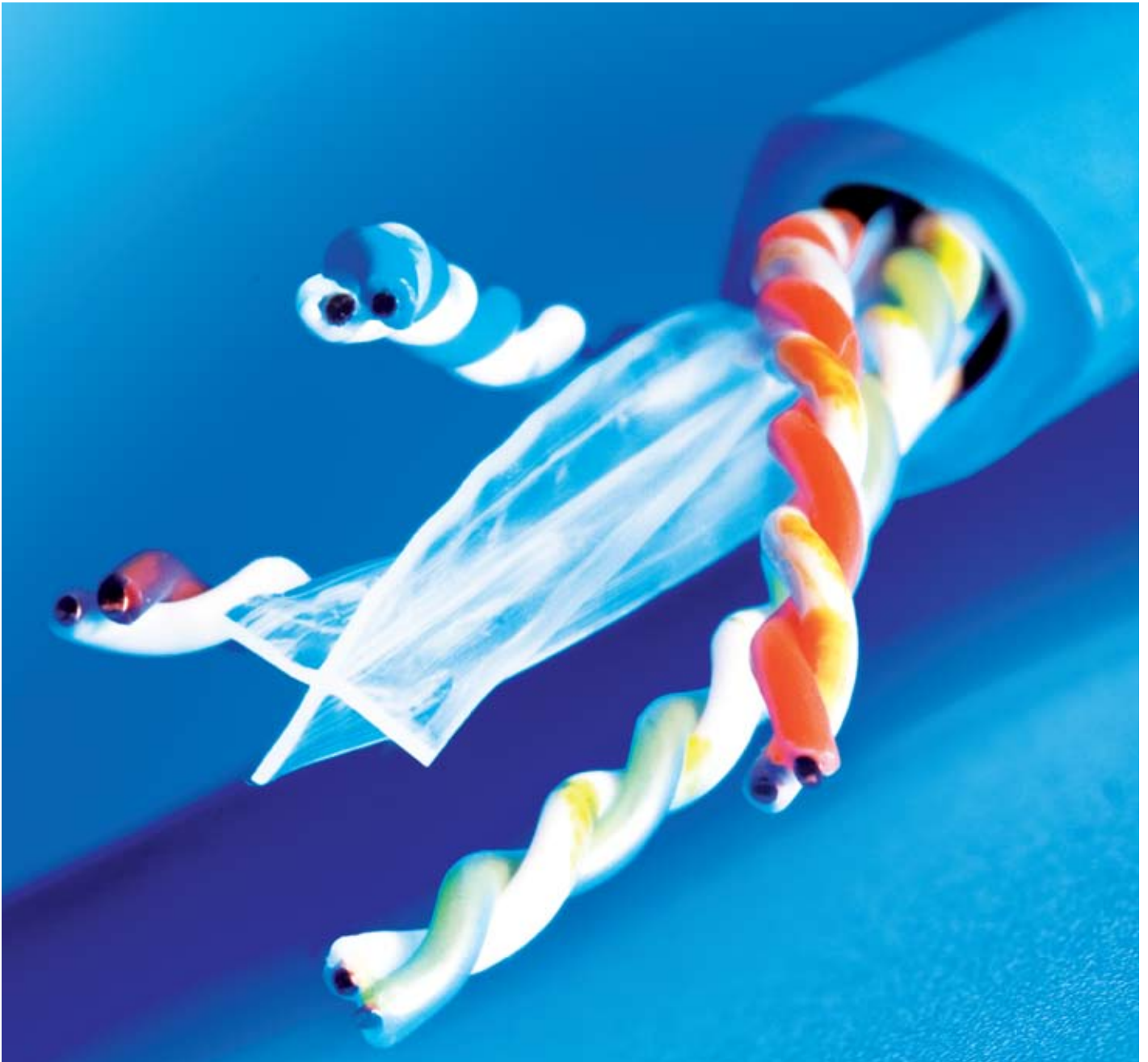


Augmented Category 6 Cabling Solutions



A trusted voice in a world of confusion

Brand-Rex has developed the enviable position of being Europe's premier, home based provider of 'best in class' communication infrastructure solutions. This position has been gained through a core philosophy of delivering maximum performance through design excellence. With a reputation as one of the most respected expert voices within the technical community, Brand-Rex has built a business and product ethos around trust. A high level of knowledge, experience and integrity, developed during three decades of networking deployment, allows Brand-Rex to consistently deliver first class solutions and a first class service to customers.

10GPlus

10GPlus is the ultimate performance Augmented Category 6 / Class E_A, structured cabling system from Brand-Rex. This industry leading, high quality solution offers superior performance and user friendly installation features allowing simple and speedy deployment of high speed cabling infrastructure.

Designed to fully support 10GBASE-T applications, 10GPlus offers IT network managers a solution that will support their needs both today and in the future.

Complete end to end solution

Brand-Rex provides a complete, end to end 10GPlus solution in both shielded and unshielded system options.

The shielded solution offers the highest possible transmission line performance characteristics and complete protection from Alien Crosstalk and external electromagnetic interference.

The unshielded solution utilises an innovatively designed 'reuleaux' shaped cable that incorporates highly balanced pairs and delivers a truly exceptional UTP performance.

The Brand-Rex 10GPlus system is 'better by design'. Whilst the design focus has been firmly behind delivering the best performing solution available to customers, we have also considered ease and practicality of installation. With this in mind, the incorporation of a unique 'first to market' Augmented Category 6 / Class E_A tool-free jack and patch cord featuring a newly developed blade server compatible plug, offer installers a system that installs as well as it performs.

Performance and Standards Compliance

Brand-Rex has an enviable reputation for providing standards exceeding performance and our team of highly skilled design engineers and test technicians have applied their vast experience in RF communications to push the boundaries of convention. The result is a complete system solution that has been meticulously designed to assure not only standard compliance, but also a considerable amount of additional headroom.



The 10GPlus set meets and exceeds the performance levels described in the published cabling standards IEC 11801 :2002 ammendment 1 (Class E_A) and TIA 568B.2-10 (Augmented Cat6).

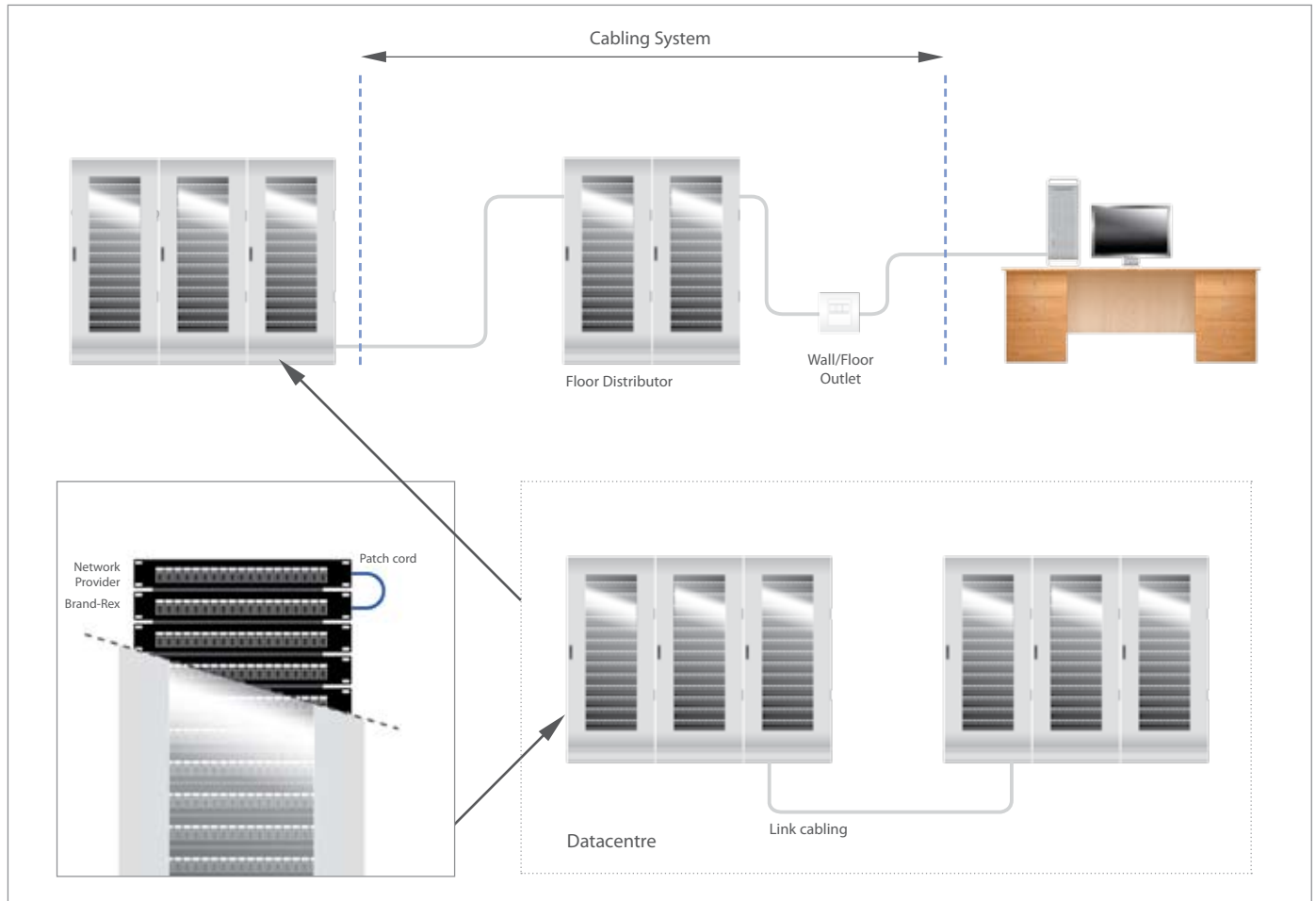
10GBASE-T was introduced as a new application standard by the IEEE in 2006 and is recognised in both the aforementioned international standards.

Warranty

10GPlus is covered under the highly valued Brand-Rex 25 year warranty scheme. The Brand-Rex warranty is unrivalled in the field providing the highest assurance of of installation quality and application performance.

10GPlus – the industry's leading Local Area Network Cabling System.

APPLICATIONS



Channel Performance

Frequency (MHz)	Guaranteed Headroom to Class E	Typical Headroom to Class E _A		1	4	10	16	100	250	300	400	500
Insertion Loss (dB/100m)	6%	2%	Spec	4.0	4.1	6.4	8.1	20.8	33.8	37.3	43.6	49.3
			Typical	2.1	4.0	6.3	7.9	20.4	33.1	36.6	42.8	48.4
NEXT (dB)	6	6	Spec	65.0	63.0	56.6	53.2	39.9	33.1	31.7	29.6	27.9
			Typical	78.8	69.3	62.9	59.7	46.6	40.0	38.6	36.5	34.9
PSNEXT (dB)	7.5	7	Spec	62.0	60.5	54.0	50.6	37.1	30.2	28.8	26.6	24.8
			Typical	77.7	67.9	61.3	57.9	42.2	37.2	35.8	33.6	31.8
ELFEXT (dB/100m)	8	9	Spec	63.3	51.2	43.3	39.2	23.3	15.3	13.7	11.2	9.3
			Typical	72.0	60.0	52.0	47.9	32.0	24.0	22.5	20.0	18.0
PSELFEXT (dB/100m)	9	10	Spec	60.3	48.2	40.3	36.2	20.3	12.3	10.7	8.2	6.3
			Typical	70.0	58.0	50.0	45.9	30.0	22.0	20.5	18.0	16.0
Return Loss (dB/100m)	3	4	Spec	19.0	19.0	19.0	18.0	12.0	8.0	8.0	8.0	8.0
			Typical	23.0	23.0	23.0	22.0	16.0	12.0	12.0	12.0	12.0
ACR (dB/100m)	9	6	Typical	76.6	65.3	56.7	51.7	26.3	6.8	2.1	-6.3	-13.5
PSACR (dB/100m)	10	7	Typical	75.6	63.9	55.0	49.9	23.9	4.1	-0.8	-9.2	-16.5

Unshielded Systems

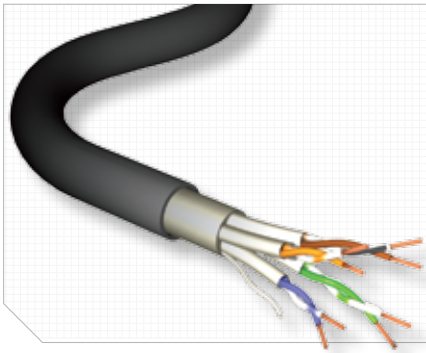
Frequency (MHz)	Guaranteed Headroom to Class E	Typical Headroom to Class E _A		4	10	16	100	250	300	400	500	
PSANEXT (dB)	-	3	Spec	67.0	67.0	67.0	67.0	60.0	54.0	52.8	51.0	49.5
			Typical	83.0	77.0	73.0	71.0	63.0	57.0	55.8	54.0	52.5
PSAELFEXT (dB)	-	5	Spec	67.0	65.0	57.0	52.9	37.0	29.0	27.5	25.0	23.0
			Typical	82.0	70.0	62.0	57.9	42.0	34.0	32.5	30.0	28.0

Shielded Systems

Frequency (MHz)	Guaranteed Headroom to Class E	Typical Headroom to Class E _A		1	4	10	16	100	250	300	400	500
PSANEXT (dB)	-	10	Spec	67.0	67.0	67.0	67.0	60.0	54.0	52.8	51.0	49.5
			Typical	90.0	84.0	80.0	78.0	70.0	64.0	62.8	61.0	59.5
PSAELFEXT (dB)	-	10	Spec	67.0	65.0	57.0	52.9	37.0	29.0	27.5	25.0	23.0
			Typical	87.0	75.0	67.0	62.9	47.0	39.0	37.5	35.0	33.0

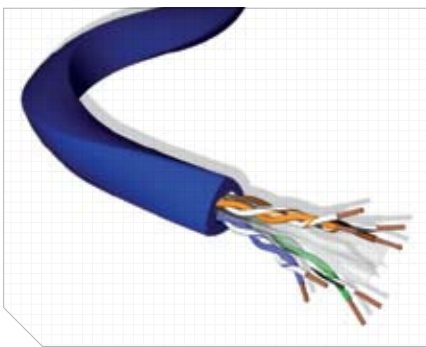
Spec = FPDAM 1.1 to ISO/IEC 11801:2002 AMM1 (CLASS E_A)

10GPLUS PRODUCT RANGE



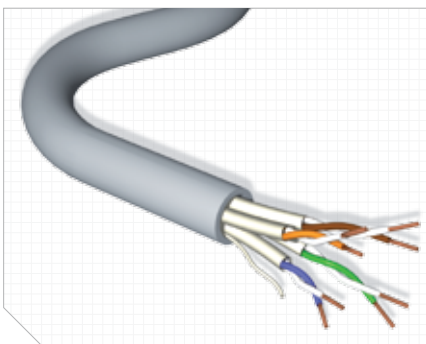
Shielded Cables

- Shielded cables ready for the new Class E_A applications
- Supports 10 Gigabit Ethernet protocol for installation in horizontal and backbone areas
- Available in F/FTP, U/FTP or S/FTP
- Provides immunity to electromagnetic noise and excellent alien crosstalk performance
- Available in 500m and 1000m reels



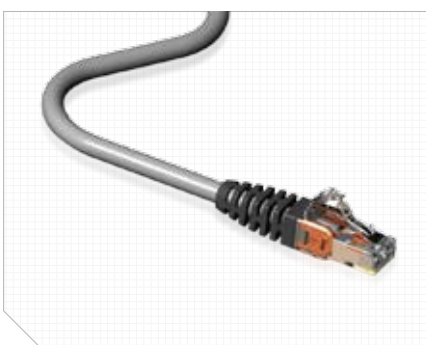
UTP Cables

- A UTP cable ready for the new Class E_A application
- 'Reuleaux' shaped cable that reduces Alien Crosstalk from adjacent cables
- A design which incorporates very highly balanced pairs
- Designed to meet the Alien Crosstalk requirements of 10GBASE-T (with performance verified in 100m length testing for both the cable and the channel configurations)
- Designed with a useable bandwidth which exceeds +ve PSAACR beyond 500MHz
- Available in 500m and 1000m reels



Zone Cable

- Designed specifically for the challenges in the data centre environment
- Smaller and lighter than equivalent conventional cables
- Designed to be compliant with UEC and CENELEC
- Standards for 500MHz cabling systems
- Can be used in part or all of a cabling channel
- Up to 70m channel length
- Available in 500m and 1000m reels



Patch Cords

All Brand-Rex patch cords employ independently verified Class E_A / Augmented Category 6 cable, and are manufactured using leading brand standards' compliant RJ-45 modular plugs. 10GPlus patch cords are blade server compatible and carry anti-snag features as standard. Our factory-made and tested patch cords offer you guaranteed quality and superior performance and carry a no quibble guarantee.



Snap-in-Jack

- Patented contact array providing enhanced electrical performance
- Colour coded contact array clearly distinguishes high performance 10GPlus jack
- Rear or top entry cable configuration for maximum flexibility
- Robust LSA style IDC design ensures maximum performance from punch down connections
- Improved engagement ensuring positive locating force in panels and outlets



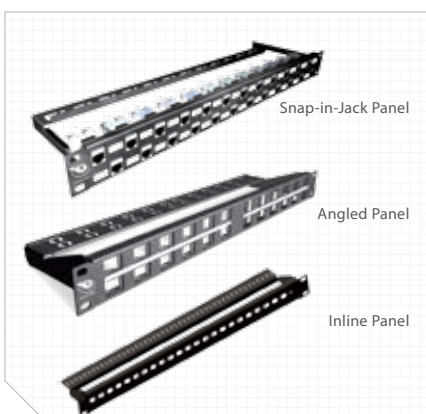
Keystone Snap-in-Jack

- Metal Housing designed to provide a superior electromagnetic shielding performance
- 500MHz component performance
- Quick tool free wire termination
- Fully compatible with our full range of faceplates



Tool-free Jack

- Innovative curved lever, designed for easy, quick and efficient product termination
- Narrow product profile - improves panel packing densities
- New unique pointed pillar lacing system for faster termination – halves the time
- Low insertion force – no special tool required
- Translucent lever allows for easy after termination inspection
- Enhanced colour coded contact array for improved performance
- No need for flat surface termination



Modular Patch Panels

We offer a range of Snap-in-Jack panels including the Modular Panel, Angled Panel and In-line Panel.

- All panels are compatible with all standard 19 inch racks and cabinets and offer as standard, full port numbering and individual pre-printed port labelling area
- Proven robust steel construction for superior structural rigidity
- The modular panel port orientation promotes pin arrays from dust and enhances contact reliability.
- Angled Panel facilitates cord routing directly into the rack thereby saving space and easing bending stress.



Copper Accessories

Brand-Rex supplies a comprehensive range of plastic accessories to provide an outlet solution for wall, trunking and floor box applications. We supply a full range of European faceplate styles.

See catalogue or visit www.brand-rex.com for the full range of copper accessories.

10GPLUS PRODUCT RANGE

Cables

U/UTP, 100 Ω, 4x2xAWG 23/1 Cable	AC6U - HF1	AC6U HF3
U/FTP, 100 Ω, 4x2xAWG 23/1 Cable	AC6 U/FTP HF1	AC6 U/FTP HF3
F/FTP, 100 Ω, 4x2xAWG 23/1 Cable	AC6 F/FTP HF1	AC6 F/FTP HF3
S/FTP, 100 Ω, 4x2xAWG 23/1 Cable	AC6 S/FTP HF1	AC6 S/FTP HF3

Available in 500m or 1000m lengths.

Data Centre Zone Cable

U/UTP, 100 Ω, 4x2xAWG 23/1 Cable	AC6 DCZ	-
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Patch Cords

	Red	Blue	Green	Yellow	Grey
27 AWG LSoH Patchcord 1m	AC6PCG010-188HB	AC6PCG010-488HB	AC6PCG010-588HB	AC6PCG010-688HB	AC6PCG010-888HB
27 AWG LSoH Patchcord 2m	AC6PCG020-188HB	AC6PCG020-488HB	AC6PCG020-588HB	AC6PCG020-688HB	AC6PCG020-888HB
27 AWG LSoH Patchcord 3m	AC6PCG030-188HB	AC6PCG030-488HB	AC6PCG030-588HB	AC6PCG030-688HB	AC6PCG030-888HB
27 AWG LSoH Patchcord 5m	AC6PCG050-188HB	AC6PCG050-488HB	AC6PCG050-588HB	AC6PCG050-688HB	AC6PCG050-888HB

x = standard range of colours = Red (188), Blue (488), Green (588), Yellow (688) and Grey(888)

Snap-in-Jacks

	Product Part Number
Unshielded Snap-in-Jack - Black	AC6JAKUOK2
Unshielded Snap-in-Jack - White	AC6JAKUOK3
Shielded Snap-in-Jack - Metallic	AC6JAKFOK2
Shielded Keystone Snap-in-Jack - Metallic	AC6JAKS000CR
Tool-free Snap-in-Jack - Grey	AC6JAKU002

Modular Patch Panels

	Product Part Number
Angled 24 Port Snap-In-Jack Panel - Black	MMCPNLX24SJ2MAN
Staggered 24 Port Modular Snap-in-jack Panel - Black	MMCPNLX24SJ2M-B
Staggered 24 Port Modular Snap-in-jack Panel - Grey	MMCPNLX24SJ8M-B
Coloured Insert 24 Port Snap-in-Jack Panel - Black	MMCPNLX24SJ2CII
Coloured Insert 24 Port Snap-in-Jack Panel - Grey	MMCPNLX24SJ8CII



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Literature Ref: 10GPLUS/UK/2 0908

