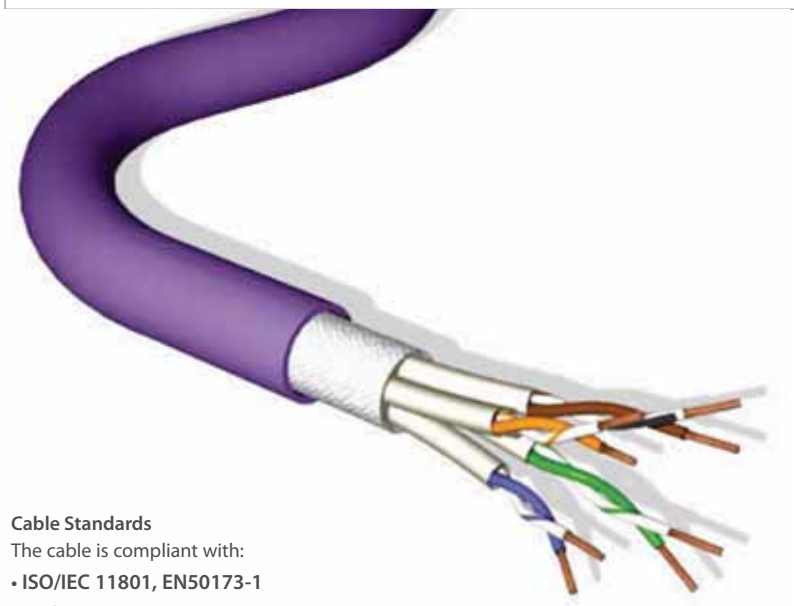

Cable Standards
The cable is compliant with:
- **ISO/IEC 11801, EN50173-1 and ISO/IEC 61156-5**

Brand-Rex Copper Cables – U-MediaPlus
Communication Cable, PIMF Cable, S/FTP, 100Ω, 4 x 2 x AWG 22/1

Electrical Characteristics @ 20°c	Specification	Typical Performance
conductor loop resistance	Max 19 0hm / 100m	12 Ω / 100m
conductor resistance unbalance	Max 2%	0.5%
dielectric Strength	1.0kV dc or 0.7kV ac for 1 min	100% in process test
insulation resistance	>500mΩ.km @ 100-500 V test voltage	>5 gΩ.km
capacitance unbalance to earth	Max 160 pF/100m	80 pF/100m
Velocity of propagation	<537.6 nsec/100m @ 100MHz	445 nsec/100m @ 100MHz (NVP for hand held testers = 0.74)
Skew	Max 25 nsec/100m @ 100MHz	5 nsec/100m @ 100MHz
mean characteristic impendance	100 Ω +/- 5 Ω @ 100MHz	100 Ω +/- 3 Ω @ 100MHz
transfer impendance	Max 10 mΩ/m @ 100 MHz	5 mΩ/m @ 100MHz (ISO 61156 grade 1 cable)
coupling attenuation up to 1ghz	Min 80 db	90 db

Frequency (MHz)		1	10	100	250	500	600	1000	1200
Insertion Loss (dB / 100m)	Spec	-	5.8	18.5	29.7	42.8	47.1	61.9	-
	Typical	2.0	5.7	18.0	28.9	41.6	45.9	60.3	66.6
NEXT (dB)	Spec	78	78	72	66	62	61	57	-
	Typical	100	100	100	84	80	78	75	74
PSNEXT (dB)	Spec	75	75	69	63	59	58	54	-
	Typical	97	97	97	81	77	75	72	71
ELFEXT (dB / 100m)	Spec	78	74	54	46	40	38	34	-
	Typical	100	90	70	62	56	54	50	48
PSELFEXT (dB / 100m)	Spec	75	71	51	43	37	35	31	-
	Typical	100	87	67	59	53	51	47	45
PS ANEXT (dB / 100m)	Spec	67	67	63	57	52	51	48	-
	Typical	100	100	85	79	75	73	70	69
PS AE LFEXT (dB / 100m)	Spec	67	58	38	30	24	23	18	-
	Typical	100	85	65	57	51	49	45	43
Return Loss (dB / 100m)	Spec	-	25	20	17	17	17	17	-
	Typical	27	30	25	22	21	21	19	18
ACR (dB / 100m)	Typical	95	91	79	52	35	29	12	4

Product Part Numbering

Part Number	Length (m)	Cable type	Colour	Nominal Cable Diameter (mm)	Nominal Weight (Kg/Km)	Calorific Value kWh/m	Fire Safety Rating
UM12-HF1-500VT	500	LSHF	Violet	7.55	65	0.15	IEC 60332-1-2
UM12-HF1-1000VT	1000						
UM12-HF1-D500VT	500	LSHF	Violet	15.2 x 7.55	131	0.31	IEC 60332-1-2
UM12-HF1-D1000VT	1000						
UM12-HF3-500BU	500	LSHF	Blue	7.75	59	0.20	IEC 60332-3-24
UM12-HF3-1000BU	1000						
UM12-HF3-D500BU	500	LSHF	Blue	7.75	121	0.41	IEC 60332-3-24
UM12-HF3-D1000BU	1000						

PRODUCT DESCRIPTION:
U-MediaPlus S/FTP, 100 Ω, 4x2xAWG 22/1 premium grade Class FA/Cat 7A cables to support gigabit Ethernet protocol for installation in horizontal and backbone areas

PRODUCT PERFORMANCE:

Core

Core conductor:	22 AWG Plain Annealed Copper Wire
Insulation:	Cellular Polyolefin
Diameter:	1.5mm nominal
Pair:	2 of the above cores
Tape Screen:	individual pairs wrapped with aluminium polyester tape applied metal side out
Pair Colour:	Blue-White/Blue, Orange-White/Orange, Green-White/Green, Brown-White/Brown

Final Assembly

Cable:	4 of the above shielded pairs Tinned Annealed Copper Wire
Sheath:	LSHF

Mechanical and Environmental

Temp - Installation:	0°c to +50°c
Temp - Operation:	-20°c to +75°c
Max Tensile Load:	10kg per simplex cable (installation)
Min Bend Radius:	8 x outer diameter (installation) 4 x outer diameter (operation)