

Utility Grade UTG20 Copper Cable with Vari-MaTriX Technology

North America,
Latin America,
Asia Pacific

PANDUIT[®]
SPECIFICATION SHEET

specifications

Utility Grade UTG20 cable shall be constructed of 23 AWG copper conductors with PE Riser (CMR) insulation. The cable shall be UL verified to the Bear Attack (BERetAC) Test MethodSM. The copper conductors shall be twisted in pairs. All four pairs shall be surrounded by a metallic Vari-MaTriX tape cut into segments of varying length and a flame retardant jacket. The Vari-MaTriX tape shall minimize the cable diameter and suppress the effects of alien crosstalk while retaining UTP electromagnetic interference immunity. The innovative cable design shall provide installation flexibility as cables can be routed in tight bundles through pathways and spaces.



Utility Grade UTG20 UTP Copper Cable with Vari-MaTriX Technology

Riser (CMR): PUR6AV04*-UTG


*To designate colour, add suffix BU (Blue), IG (International Gray), WH (White), or YL (Yellow).

For additional cable colors, contact customer service.

technical information

Category 6A/Class EA channel and component performance:	Certified channel performance in a 4-connector configuration up to 100 meters and exceeds the requirements of ANSI/TIA-568.2-D Category 6A and ISO 11801 Class EA standards swept up to 650 MHz for supporting 10GBASE-T transmission over twisted-pair cabling systems as part of the Panduit [®] TX6A™ 10Gig UTP Copper Cabling System. Certified component performance up to 100 meters and exceeds the ANSI/TIA-568.2-D Category 6A and IEC 61156-5 Category 6A standards for supporting 10GBASE-T transmission over twisted-pair cabling systems
Standards compliance:	UL Verified - Bear Attack (BERetAC) Test Method SM
PoE Performance:	150m or more up to 100 W (CMR-LP - 0.5A) Meets IEEE 802.3af, IEEE 802.3at and IEEE 802.3bt for PoE applications UL PoH certified per UL4299
Cable diameter:	Riser (CMR): 0.260 in. (6.6mm) nominal
Conductors/insulators:	23 AWG solid copper insulated with flame retardant PE (CMR)
Flame rating:	Riser (CMR): UL1666
Installation tension:	25 lbf (110 N) maximum
Temperature rating:	0°C to 60°C (32°F to 140°F) during installation -20°C to 75°C (-4°F to 167°F) during operation
Cable jacket:	PE Riser (CMR): Low smoke flame retardant PVC
Cable weight:	Riser (CMR): 13.1kg/305m (28.9 lbs./1000 ft.)
Packaging:	Riser (CMR): 14.1kg/305m (31.1 lbs./1000 ft.) Package tested to ISTA procedure 1A

key features and benefits

Vari-MaTriX Technology 	Best-in-class cable diameter delivers superior PSANEXT and PSAACRF suppression while retaining UTP EMI immunity
Extended Transmission Distances	Supports low bit rate devices like OT and physical security applications at up to 150m, while also supporting increased distances for high bit rate IP-based applications
Higher Bandwidth Capabilities	Maximum bandwidth of 650 MHz provides more headroom margin for connectivity performance and consistency with data transmission speeds up to 10 Gbps at 100m
Extended AV distances	Provides design flexibility for high definition 4K video surveillance, HDBaseT and Gbps SDVoE applications
Increased PoE application distance	Minimizes degradation of insertion loss and maintains performance at longer distances with edge devices while still meeting code compliance
Ease of Installation	Flex Force Level 2 parameters simplifies installation readiness and highlights the ease of handling for pulling, installing, and terminating

applications

The Utility Grade UTG20 UTP Copper Cable with Vari-MaTriX Technology is a component of the TX6A™ 10Gig Copper Cabling System. Interoperable and backward compatible, this end-to-end system provides design flexibility to protect network investments well into the future.

Key applications include:

- 10GBASE-T Ethernet
- New and upcoming Wifi
- Smart building
- Power over Ethernet (PoE)
- High definition audio/visual
- 5G DAS

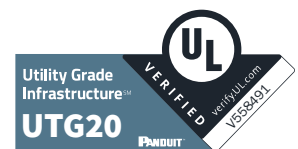
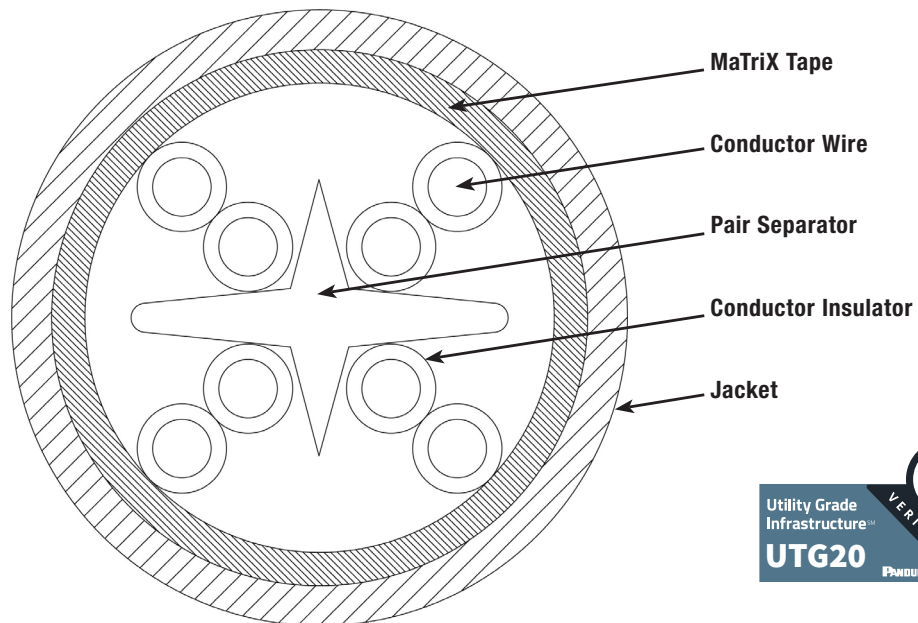
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additional specifications

Mechanical Test	
> 90 lbf (400 N)	> 90 lbf (400 N)
4 × cable diameter	4 × cable diameter
Electrical Test	
Nominal Velocity of Propagation (NVP)	65%
Operating Voltage, Maximum	80 V

UL® Verified UTG Attributes (UTG Framework 2.0)	
Maximum horizontal distance at 10 Mbps	185m (606 ft.)
Maximum horizontal distance at 100 Mbps	150m (492 ft.)
Maximum horizontal distance at 1 Gbps	100m (328 ft.)
Maximum horizontal distance at 10 Gbps	50m (164 ft.)
Maximum HDBaseT and Gbps SDVoE distance	100m (328 ft.)
Video Surveillance (1080p HD and 4K UHD)	150-185m (492-606 ft.)
Maximum PoE distance - Type 1 (15.4 W)	185m (606 ft.)
Maximum PoE distance - Type 2 (30 W)	150m (492 ft.)
Maximum PoE distance - Type 3 (60 W)	100m (328 ft.)
Maximum PoE distance - Type 4 (100 W)	100m (328 ft.)
Maximum bundle size with PoE (Type 4 - 0.5A) @ 45°C	72 cables
Flex Force Level	1

cable construction



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