

Cat6a Ethernet



Q2056-1 Cable Specifications						
	Part Number	Wire/Cable Type	Flexibility	Minimum Cut Length (ft)*	Approximate Weight (lb/ft)	Price per foot
	Q2056-1	Cat6a Ethernet	Semi-flexible	20	0.02	\$1.15
Physical Properties						
Conductor Gauge	26 AWG		Conductor Stranding	7-Stranded Tinned Copper		
Conductor Material	Tinned Copper		Conductor Insulation Wall Thickness	0.010 in, nominal		
Conductor Assembly	4 twisted pairs		Bare Conductor Diameter	0.019 in, nominal		
Color Code	Pair 1	Natural, Orange	Insulated Conductor Diameter	0.039 in, nominal		
	Pair 2	Gray, Brown	Twisted Conductor Diameter	0.078 in, nominal		
	Pair 3	Natural, Green	Overall Cable Diameter	0.223 in, nominal		
	Pair 4	Gray, Blue	Jacket Color	Black		
Voltage Rating	300V		Jacket Thickness	0.021 in, nominal		
Temperature Rating	-20 to 105 °C (-4 to 221 °F)		Jacket Material	PVC		
Plenum	Yes		Sunlight Resistant	No		
Shield	Shielded		Oil Resistance	Yes		
Drain	Yes		Flame Retardant	No		
Conductor Insulation Material	Foamed FEP		Sample Print Legend	QUABBIN DATAMAX CAT 6a F/UTP PATCH CORD P/N xxxx -- PATENT PENDING -- C(ETL)US TYPE CMP 26 AWG 105C -- RoHS -- (LOT DESIGNATOR) (SEQUENTIAL FOOTAGE)		
Minimum Bend Radius	2.33in					
Cabled Core Diameter	0.181 in					
Electrical Characteristics (for 100 meters of cable)						
Impedance	100 ± 15 Ω (1 - 100 MHz) 100 ± 20 Ω (100 - 500 MHz)		UL Classification	NEC (ETL) TYPE CMP CEC C(ETL) TYPE CMP		
Capacitance	13.5 pF/ft @ 1MHz; Nominal		Approvals**	cETLus, RoHS		
Resistance, Max.	42.6 Ω DC per 1000ft		Attenuation Crosstalk Ratio, Far End (ACRF)	1 ≤ f ≤ 500 MHz: 27.8 - 20 LOG(f/100) dB MIN		
Dielectric Withstanding, Min.	1500V RMS		Insertion Loss	1 ≤ f ≤ 500 MHz: 1.5[1.82 √f + 0.0091(f) + 0.25/√f] dB		
Return Loss	1 ≤ f < 10 MHz: 20 + 5 LOG(f) dB MIN 10 ≤ f < 20 MHz: 25 dB MIN 20 ≤ f ≤ 250 MHz: 25 - 8.6 LOG(f/20) dB MIN		Power Sum Attenuation to Crosstalk Ratio, Far End (PSACRF)	1 ≤ f ≤ 500 MHz: 24.8 - 20 LOG(f/100) dB MIN		
Near End Crosstalk (NEXT)	1 ≤ f ≤ 500 MHz: 44.3 - 15 LOG(f/100) dB MIN		Cross Section			
Power Sum Near End Crosstalk (PSNEXT)	1 ≤ f ≤ 500 MHz: 42.3 - 15 LOG(f/100) dB MIN					
TCL	1 ≤ f ≤ 500 MHz: 30 - 10 LOG(f/100) dB MIN					
ELTCTL	1 ≤ f ≤ 30 MHz: 35 - 20 LOG(f) dB MIN					
Velocity of Propagation	0.68					
Delay	1 ≤ f ≤ 500 MHz: 534 + 36/√f ns MAX					
Delay Skew	1 ≤ f ≤ 500 MHz: <45ns MAX					

* See web store www.AutomationDirect.com for maximum cut lengths

** To obtain the most current agency approval information, see the Agency Approval Checklist section on the part number's web page at www.AutomationDirect.com



Please Note: Our prices on Ethernet Cable are closely tied to the market price for copper. This allows us to offer the best savings possible if conditions are favorable; however, it also means that our prices may increase if market conditions warrant.



DataMax® Ethernet Cables

Quabbin DataMax Ethernet Cable

The Quabbin DataMax® Category network cables are proudly made in the USA and are available in Cat5e, 6, 6a or 6e. These cables are offered in 26AWG or 24AWG stranded tinned copper or bare solid copper in shielded or unshielded constructions. Designed to be round and smooth, Quabbin DataMax® Category network cables are compatible with most popular plugs for quick termination and easy installation.

When it comes to network cable, flexibility can mean many different things. The first and most obvious is the ease with which it bends. The importance behind having a pliable cable has to do with installation and cabinet routing. Flexibility allows easy manipulation between devices while increasing the durability, which is important when considering a lifetime of "moves & changes" that can occur in a dynamic network environment. Durability is paramount in allowing these changes to take place without compromising the cable.

The Quabbin DataMax® Category network cables exceed the requirements of ANSI/TIA-568-C.2, are compatible with Cat 5e and 5 hardware, and are suitable for applications from 10 Base-T to 1000 Base-T (Gigabit Ethernet).

Also available are Quabbin DataMax® MIL-spec Cat6 cables with black low smoke PVC jacket and special conductor insulations colors.

* DataMax is a registered trademark of Quabbin Wire and Cable Corporation.

** EtherNet/IP is a trademark of ODVA, Inc.

Features

- Available in Category 5e, 6, 6e, and 6a
- In compliance with TIA 568-C.2 and TIA 1005
- Designed for use in EtherNet/IP systems **
- 4 twisted pairs
- Unshielded or overall foil shields
- UL Type CM and UL AWM Style 2463 (80°C, 600V)
- Some cables available with conductor color code for MIL spec applications
- Cut to length in 1 foot increments
- Low 20 foot minimum length
- Made in the USA



Click on the thumbnail or go to <https://www.automationdirect.com/VID-WD-0016> for a short introduction on our cut to length cable

