



Monoprice™

Industrial Cat6A Ethernet Patch Cable, 24AWG U/UTP, Halogen-Free PUR Jacket, 10Gbps Tested to TIA Cat 6A Channel

The Monoprice Industrial Cat6A Ethernet Patch Cable is built for the install where the cable choice actually matters: industrial control cabinets, data center rows, smart-infrastructure deployments, and safety-critical spaces where standard PVC patch cables don't meet the brief. The halogen-free polyurethane (PUR) jacket replaces the soft PVC found on most retail-grade patches with a material that holds its shape through frequent flex, resists hydrocarbons and abrasion, and does not release corrosive halogen (acid) gases if burned.

Internal construction is 24AWG U/UTP for full 10GBASE-T bandwidth over the patch run and headroom for Power over Ethernet to higher-draw endpoints. Representative sample lengths across the family were independently tested against TIA Cat 6A Channel limits and passed with positive margin on insertion loss, NEXT, ACR-F, and return loss. Compliant Network Standards list covers 10BASE-T through 10GBASE-T.

Available in eight lengths from 5 ft to 60 ft (PIDs 49973 through 49980), all in Black. Pair with the Monoprice 26AWG S/FTP variant (PIDs 49965-49972) for installs requiring shielding against high ambient electromagnetic interference.

- Halogen-free polyurethane (PUR) jacket. Holds up to oil, chemicals, abrasion, frequent flex, stays, and won't release corrosive halogen (acid) gases if exposed to fire.
- 24AWG conductors for 10GBASE-T bandwidth and PoE headroom. Heavier gauge than 26AWG retail-grade patches; lower DC resistance for cooler-running PoE delivery to wireless access points, PTZ cameras, and signage controllers.
- U/UTP construction. Lighter and more flexible than S/FTP; lays cleaner across high-density patch panels and bends to tighter radii at the connector exit.
- Eight lengths from 5 ft to 60 ft. Order the exact run length needed without stocking awkward over-long cables behind the rack.
- Globally compliant and independently verified to meet RoHS 3, REACH, TSCA Section 6(h), Proposition 65, and EU POP standards for quality, safety, and environmental responsibility.
- Made for installers and integrators. Industrial, data center, smart infrastructure, surveillance, transportation, and commercial backbone deployments.



HALOGEN-FREE PUR JACKET

The halogen-free PUR jacket offers enhanced flexibility, abrasion resistance, and chemical durability for professional applications. Unlike PVC, it does not release corrosive halogen gases when exposed to fire, helping protect both equipment and infrastructure.



CERTIFIED FOR RELIABLE 10GBASE-T PERFORMANCE

Tested and verified to meet TIA Cat 6A channel requirements, supporting full 10GBASE-T Ethernet speeds with proven performance headroom. Ideal for enterprise, data centre, and commercial network deployments demanding dependable 10 Gigabit connectivity.



24 AWG CONDUCTORS FOR POE HEADROOM AND DISTANCE

Heavier than typical 26 AWG retail patch cables; lower DC resistance.

Full Specs

Cable category	Cat 6A
Construction	U/UTP (Unshielded/Unshielded Twisted Pair)
Conductor gauge	24 AWG
Tested bandwidth	500 MHz
Supported network standards	10BASE-T, 100BASE-T, 1000BASE-T, 2.5GBASE-T, 5GBASE-T, 10GBASE-T
Connectors	RJ45 (8P8C) male, 50 μ gold-plated, T568B
Available lengths	5, 10, 15, 20, 25, 35, 50, 60 ft
Jacket material	Polyurethane (PUR), halogen-free
NVP (Nominal Velocity of Propagation)	74%
DC resistance, 5 ft sample	0.16 Ω
DC resistance, 15 ft sample	0.70 Ω
DC resistance, 25 ft sample	1.25 Ω
DC resistance, 35 ft sample	1.78 Ω
Delay skew	≤ 2 ns
Propagation delay	≤ 555 ns (TIA Cat 6A)
Jacket color	Black
Outer cable diameter	6.0 $\pm$ 0.2 mm
Operating temperature range	-40°C to +80°C
Conductor type (solid vs stranded)	Stranded
Connector boot type	PVC Molded Boot