

EXTENDED DISTANCES Over Copper Cables

QUESTIONS TO ASK YOUR EXTENDED DISTANCE SYSTEM PROVIDER

Was it tested in real world conditions? Yes, Leviton has performed extensive testing that includes thousands of combinations of different device ports, environmental temperature cycling, and measuring data transmission quality in long duration tests.

Q:

U:

At what temp is your extended distance valid?

Our advertised lengths for the ATLAS-X1 SST system are valid from -20 °C to +60 °C (-4 °F to +140 °F), and were tested in an environmental chamber with temperature cycling to mimic real-world conditions observed inside and outside buildings.

- Q: Does your extended distance guarantee vary by PoE type? Yes, our extended distance guarantees differ based on PoE type. Type 1 PoE (15 Watts) is supported over longer distances compared to the higher power PoE Types (Types 2,3 and 4).
- Q: How many devices was your extended distance solution tested on? Our testing included over 100 different switches and Ethernet devices and over 28,000 different port combinations over multiple channel lengths.
- O: Is your extended distance guarantee valid for a four-connector channel?

Yes, our extended distance guarantee is valid for multiple channel configurations. The specific channel configurations are defined in our system data sheets. These ensure you can maintain the full maintenance and configurability benefits of structured cabling, which save network managers time and allow the physical infrastructure to be quickly reconfigured to meet evolving needs.

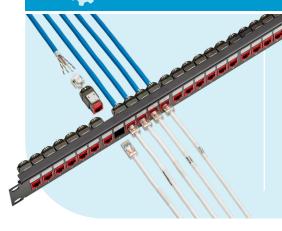
O: Does it support speeds above 1 Gbps?

Yes, the ATLAS-X1 SST system supports distances beyond 100 m for speeds of up to 5 Gbps, while the Cat 6A cable delivers speeds of up to 10 Gbps where standard channels are below the 100 m limit. This simplifies project BOMs, purchasing complexity, and on-site material management with one cabling solution for channels both above and below 100 m.

O: Does a larger gauge size make for better performance?

No, simply adding more copper to a cable doesn't ensure it will support data and power transmission beyond 100m with good quality. Other design criteria and parameters must be considered and tuned for reliable performance.

SOLUTION OVERVIEW



Leviton's **ATLAS-X1™ SST MILLENNIUM™** cabling system ensures reliable, highperformance connectivity beyond 100 meters. Tested rigorously in Leviton's Systems Verification Lab (SVL), the system offers warrantied support for extended distances, allowing you to confidently connect devices beyond standard reach.

Perfect for mission-critical applications requiring top-notch 10GBASE-T performance, this system supports PoE up to 100 watts, in-building 5G deployments, and smart building applications.

FEATURES AND **BENEFITS**

- Real-world readiness: Proven to work reliably in everyday conditions, not just in labs
- Exceeds the Category 6A standard for all standards-compliant channels up to and including 4-connector channels
- Supports speeds from 10 Mbps all the way up to 10 Gbps
- Extensively tested: Backed by leading research and hundreds of hours of testing for link status, frame errors, aging electronics, and temperature performance
- 25-year application assurance warranty
- SST Cat 6A UTP cable simplifies BOMs, reduces jobsite complexity, and is in stock at distribution partners around the globe
- Mission-Critical Performance, Extended Reach, Maximum Installation Efficiency
- Available in CPR, plenum*, riser, and outdoor ratings

Leviton's **ATLAS-X1™ SST Global MILLENNIUM™** cabling system now guarantees 140 meter support for 2.5 Gbps Ethernet, 155 meter support of 1 Gbps Ethernet, and 200 meter support of 10 Mbps Ethernet.

Please contact your local Leviton sales representative for full details of the configurations that deliver these extended distances.