SYSTEM DATA SHEET — EUROPE

# ATLAS-X1™ CAT 6A SHIELDED SYSTEM

**Ideal for applications that require the most advanced Cat 6A performance with added signal isolation**

- Exceeds ISO/IEC 11801-1 Class $E_A$ and ANSI/TIA-568.2-D Cat 6A requirements for channel, link, and component requirements to support IEEE 10GBASE-T (802.3an) networks
- Third-party tested and verified
- Ensures excellent alien crosstalk (AXT) and EMI/RFI immunity
- Error-free performance up to 10 Gigabit Ethernet with full duplex transmission
- Backwards compatible with Gigabit Ethernet to provide seamless migration path to 10GBASE-T and supports all Cat 6 and Cat 5e system requirements

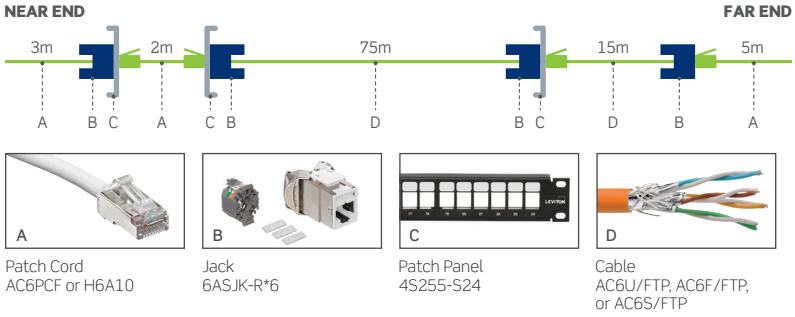
## TYPICAL* SYSTEM PERFORMANCE

**ATLAS-X1 CAT 6A SHIELDED SYSTEM CHANNEL TYPICAL MARGINS***

| | Insertion Loss | NEXT | PSNEXT | ACR-F (ELFEXT) | PSACR-F (PSELFEXT) | Return Loss | ACR-N | PSACR-N | PSANEXT | PSAACR-F |
|---|---|---|---|---|---|---|---|---|---|---|
| Standard (500MHz) | 49.4 dB | 27.9 dB | 24.8 dB | 9.3 dB | 6.3 dB | 6.0 dB | 21.5 dB | 24.5 dB | 49.5 dB | 23.0 dB |
| Typical Performance Margin | 4.5% | 8.0 dB | 7.0 dB | 8.5 dB | 9.0 dB | 7.0 dB | 8.0 dB | 9.0 dB | 17.0 dB | 17.0 dB |

*All parameters comply with ANSI/TIA-568.2-D Cat 6A and ISO/IEC 11801-1 Class $E_A$ requirements across the entire frequency range. All values represent typical margins for 19- to 100-meter channel configurations. System performance is representative of the specific components and topologies as listed on this system data sheet. Typical margins listed reflect channels of 21-93 meters when using 28 AWG patch cords (H6A10). Typical performance values are based on verified test results, either third-party, in-house and/or field test data. Field-installed channel margins may vary based on the accuracy of the handheld tester, system design and installation practices. Only Leviton approved testers may be used. All stated performance specifications are subject to the terms and conditions of the manufacturers warranties. Details at www.leviton.com.

## SYSTEM TOPOLOGY




Patch Cord
AC6PCF or H6A10

Jack
6ASJK-R*6

Patch Panel
4S255-S24

Cable
AC6U/FTP, AC6F/FTP, or AC6S/FTP

## RECOMMENDED FOR

10GBASE-T network applications and mission-critical systems

Data center channel configurations from 9 to 100 meters

Data center applications including computer clusters and end-of-row architectures

Optimal total cost of ownership for financial, health care, government, transportation, and education environments

Network applications where EMI/RFI may be present and data security is critical

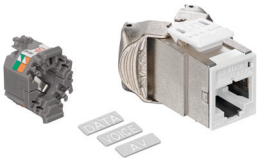
Networks with high bandwidth utilisation requirements

Exceeds PoE standards up to 100 watts

AV systems for high-end conference rooms and classrooms

Wireless applications supporting IEEE 802.11ac and higher

Cat 6A
Atlas-X1 Shielded



## JACKS

### ATLAS-X1™ CAT 6A SHIELDED QUICKPORT™ JACKS

- Independently tested and guaranteed to exceed all component, permanent link, and channel performance requirements
- Patented Retention Force Technology™ protects against tine damage and maintains contact force between plug and jack, preventing arcing from intermittent disconnects in PoE applications
- PoE optimized tine geometry prevents arcing damage where plug and jack make contact, extending the life of the jack and ensuring maximum performance (see specification sheets for full PoE capabilities)
- Solid metal body dissipates 53% more heat than plastic, minimizing damage from excess heat in PoE applications
- Available with internal shutter to protect from dust and debris
- Unique tool-free design requires no specialized termination or re-termination tool
- Short jack design supports a wider range of applications (e.g. shallow boxes, enclosures, bend radius, etc.)
- Tested and approved for use in air-handling spaces (plenum rating) in accordance with UL Standard 2043
- Interchangeable icons in 13 colors (VOICE, DATA, AV, and blank) make it easy to identify and track data, voice, or other functions (select jacks include color matching icons)
- Proudly manufactured in the U.S.

## PATCH PANELS

### ATLAS-X1 SHIELDED QUICKPORT AND E2XHD PATCH PANELS

- Available in QuickPort and cassette-style in flat and angled configurations
- QuickPort patch panels are available in 1RU 24-port as well as 1RU 48-port high density configurations
- Shielding protects against Electromagnetic Interference (EMI) and Radio Frequency Interference (RFI), and provides excellent alien crosstalk (AXT) suppression

## PATCH CORDS

### CAT 6A PATCH CORDS

- Tested and verified for ISO Cat 6A component and channel requirements
- Nominal OD of 6.0 mm
- Short boot to reduce installed bend radius requirements

### CAT 6A HIGH-FLEX PATCH CORDS

- Tested and verified for TIA Cat 6A component and channel requirements
- Nominal OD of 4.7 mm to maximize cable pathway capacity
- Enhanced flexibility and short boot to minimize bend radius requirements
- 28 AWG patch cords have limitations in terms of supported channel lengths and PoE levels. Please see product spec sheet for details of these limitations.

## CABLES

### CAT 6A SHIELDED CABLES

- 23 AWG solid annealed copper wire
- 4 twisted pairs cabled together, available in multiple screened constructions, providing EMI shielding
- Available in a range of sheath materials to suit a variety of installation environments, including CPR fire performance ratings Eca, Dca, Cca and B2ca, and color coded for identification
- Designed and constructed to give optimum electrical performance to the following standards:
  - ISO/IEC 11801-1 Class $E_A$, IEC 61156-5
  - EN 50173-1 and EN 50288-10-1
  - ANSI/TIA-568.2-D Cat 6A
- Supports 10GBASE-T
- Meets the design requirements of 802.11ac wireless
- Designed and manufactured in a carbon neutral facility in the UK
- 100% recyclable reels and boxes (AC6U/FTP)

## PART NUMBERS - Common part numbers shown. Many additional colors, lengths, CPR EuroClass ratings, and other options available online.

| JACKS | | | | | STANDARD | WITH SHUTTER | ADDITIONAL ICONS |
|---|---|---|---|---|---|---|---|
| Atlas-X1 Cat 6A Shielded QuickPort Jack | | | | | 6ASJK-R*6 | 6ASJK-S*6 | ICONS-IC* |
| **E2XHD CASSETTES** | | | | | | | |
| e2XHD Empty Cassette+ | | | | | | | E2XHD-BRK |
| **PATCH PANELS** | | | | | **1RU, 24-PORT** | **1RU, 48-PORT** | **2RU, 48-PORT** |
| e2XHD High-Density Flat Patch Panel~ | | | | | | E2X1F-E48 | |
| e2XHD High-Density Angled Patch Panel~ | | | | | | E2X1A-E48 | |
| Atlas-X1 Flat Shielded QuickPort Patch Panel+ | | | | | 4S255-S24 | 4S255-D48 | 4S255-S48 |
| Atlas-X1 Angled Shielded QuickPort Patch Panel+ | | | | | 4S256-S24 | | 4S256-S48 |
| **PATCH CORDS** | **WHITE** | **YELLOW** | **RED** | **BLUE** | **GREEN** | **GRAY** | **BLACK** |
| Cat 6A Patch Cord | AC6PCFxxx-3CCHB | AC6PCFxxx-6CCHB | AC6PCFxxx-1CCHB | AC6PCFxxx-4CCHB | AC6PCFxxx-5CCHB | AC6PCFxxx-8CCHB | AC6PCFxxx-2CCHB |
| Cat 6A High-Flex 28 AWG Patch Cord | H6A10-xxW | H6A10-xxY | H6A10-xxR | H6A10-xxL | H6A10-xxG | H6A10-xxS | H6A10-xxE |
| **CABLES** | | | | **B2ca (ORANGE)** | **Cca (GREEN)** | **Dca (BLUE)** | **Eca (VIOLET)** |
| Cat 6A Cable, U/FTP, LSZH/LSHF on a 500m reel¥ | | | | AC6U/FTP-B2ca-500OR | AC6U/FTP-Cca-500GN | AC6U/FTP-Dca-500BU | AC6U/FTP-HF1-Eca-500VT |
| Cat 6A Cable, U/FTP, LSZH/LSHF in a 305m box¥ | | | | AC6U/FTP-B2ca-B305OR | AC6U/FTP-Cca-Rlx-305GN | AC6U/FTP-Dca-Rlx-305BU | AC6U/FTP-HF1-Eca-Rlx-305VT |
| Cat 6A Cable, F/FTP, LSZH/LSHF on a 500m reel¥ | | | | AC6F/FTP-B2ca-500OR | AC6F/FTP-Cca-500GN | AC6F/FTP-Dca-500BU | AC6F/FTP-HF1-Eca-500VT |
| Cat 6A Cable, S/FTP, LSZH/LSHF on a 500m reel¥ | | | | AC6S/FTP-B2ca-500OR | AC6S/FTP-Cca-500GN | AC6S/FTP-Dca-500BU | AC6S/FTP-HF1-Eca-500VT |

* = Jack Color: White (W), Lt. Almond (T), Ivory (I), Yellow (Y), Orange (O), Crimson (C), Dark Red (R), Purple (P), Blue (L), Green (V), Gray (G), Black (E), Brown (B) + = Sold empty, load with 6ASJK jacks
~ = Sold empty, load with E2XHD-BRK cassette xxx = Length in Meters xx = Length in Feet: 1-50 (0.3-6.1 meters)
¥ = Cable Color: Orange (OR), Green (GN), Blue (BU), Violet (VT). Additional colors available as non-standard offering. Duplex and 1000m reel options are also available.

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