

## XLT-400 Long-Reach Ethernet

**Gain the reach and performance of fiber over existing copper wire**



- ✓ **75Mbps Symmetrical Bit-Rates**  
*Adaptive link algorithms to 10,000'*
- ✓ **Advanced Network Topologies**  
*Point-to-Point, Point-to-Multipoint, Redundant Ring, or Mesh Networking\**
- ✓ **Eliminate the Need for Fiber**  
*No need to dig new trenches, lay new conduit, or pull new fiber*

The XLT-400 family of FastCopper switches provides up to 75Mbps symmetrical bit rates over two ordinary copper wire pairs. Programmable band-plans and an advanced link algorithm tailor the link reliability and performance to challenging wire environments. Proactive performance monitoring and multipoint networking ensure the highest levels of reliability.

A full-featured and user friendly management system easily integrates the XLT-400 series into an existing Ethernet-based, managed topology. With powerful features and flexible installation; XLT is the key network component for Intelligent Transportation Systems (ITS), power stations, rail yards and stations, warehouse facilities, and extended industrial campus networks.

### Management

XLT-400 series *FastCopper* switches offer sophisticated link management tools including digitally programmable band-plans, embedded spectrum analyzer, and an advanced link algorithm. Network administrators can monitor critical data links and manage each link for maximum availability.

Manage XLT-400 units with features built to support an extensive enterprise network e.g. RADIUS network authentication, user selectable alerts, and SNMPv2c.

### Intelligence

**Advanced VLANs** allow operators to assign each port a unique 802.1Q tag, trunk pre-tagged packets, or transport all packets transparently.

**802.1d Spanning Tree** provides automatic fault tolerance and redundant ring topology for critical networks.

**Multiple physical topologies** include PtP, PtMP, or MP Daisy Chain or Ring. With link performance up to 75Mbps; the XLT-400 in Daisy Chain or Ring mode minimizes the number of pairs required for multi-node networks.

\* Multi-node mesh networking will be a future upgrade option.

### Simplicity

Easily add/move/change to any location over existing or newly pulled telephone-grade or data-grade wires. Quickly manage individual nodes using the intuitive webUI. XLT-400 runs the latest Tut OS, sharing a common management system with other Broadband products from Tut Systems.

## XLT-400 series *FastCopper* Long-Reach Broadband Switch

The XLT-400 series provide high performance, reliable Ethernet connections over two UTP wire pairs, at distances up to 10,000ft (3,000m). Each XLT-400 series switch has four (4) 10/100Base-T local Ethernet ports and one, two, or four (1/2/4) Ethernet<sup>XD</sup> long-reach UTP ports. Two telephone-grade UTP wire pairs are required per inter-XLT link.

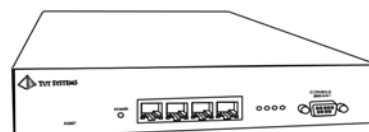
### Specifications

<b>Ethernet<sup>XD</sup></b>	Programmable QAM modulation Optimized symmetrical data rates Programmable bandplans
<b>Interfaces</b>	4 x RJ45, 10/100Mbps auto-sensing 1 2 4 x keyed UTP Connectors 1 x dB9, female console port
<b>Power</b>	100 – 240VAC, 50/60Hz; 50 Watts
<b>Management</b>	Console, Telnet, Web UI SNMPv2c standard and enterprise MIB Ethernet OAM (future release) Multi-level Password protected Syslog server FTP software updates Config script support
<b>Physical</b>	Rack or wall mount (9" x 9" x 1.75") / (22.8cm x 22.8cm x 4.4cm)
<b>Environment</b>	Operating Temperature: -20c to +70c Humidity: 5% to 95%
<b>Compliance</b>	FCC Part 15A EN60950-1, UL60950-1, CE (pending)
<b>Networking Protocols</b>	802.1, 802.1d, 802.3 Ethernet standard protocols TCP/IP protocol suite
<b>QoS</b>	2 transmission queues per port Packet classifier: 802.1P, Physical port
<b>VLAN</b>	802.1Q tagged VIDs: 2 – 4095 Port or Tagged based VLANs 128 concurrent tagged VLANs
<b>L2 switching</b>	8k MAC table

### XLT- 400 rate adaptive Rate/Reach (24AWG UTP | 0.5mm)

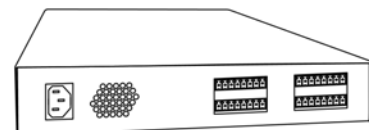
1,000ft(300m):	Up to 75Mbps
5,000ft(1.5km):	Up to 20Mbps
10,000ft(3km):	5Mbps

### XLT-400 front panel connectors

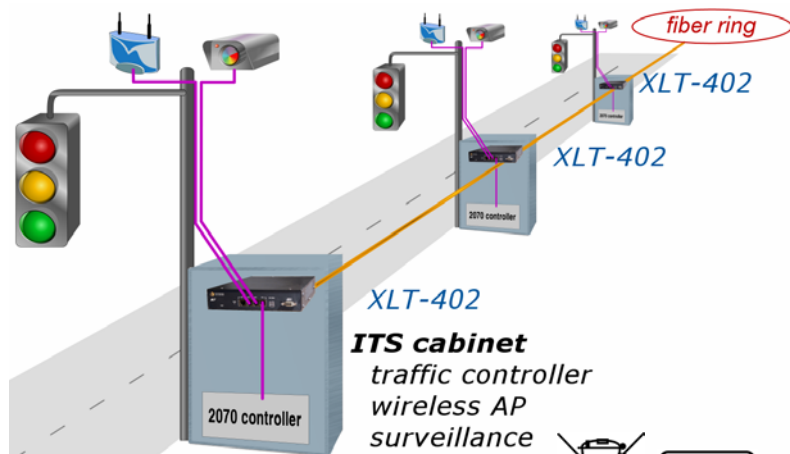


- 4 x 10/100Mb Ethernet uplink
- 1 x db9 console

### XLT-400 rear panel connectors (XLT-404 shown)



- 4 x keyed UTP connector
- 1 x IEC320 AC power



### Application Example – Intelligent Transportation Systems

XLT-400 leverages existing copper interconnects already installed in cities and municipalities. Enable video surveillance, intelligent traffic control, traffic message signs and public wireless access – without the high cost of fiber.

### Ordering Information

Part No	Model	Description
42211	XLT-401	4 10/100Mb ports, 1 UTP ports for connection to other XLT-400 units
42212	XLT-402	4 10/100Mb ports, 2 UTP ports for connection to other XLT-400 units
42214	XLT-404	4 10/100Mb ports, 4 UTP ports for connection to other XLT-400 units