



LinX-ST Single Transceiver All-Outdoor Licensed Microwave Gigabit Radio

LinX-ST is a single-transceiver all outdoor, IP radio system operating from 6GHz to 42GHz, modulations to 4096QAM, and ultra-wide bandwidth operation to 112MHz ETSI and 160MHz ANSI.

LinX-ST can achieve capacities up to 1.6Gbps* per radio and even higher capacities with compression enabled or when operating in High Capacity Mode.

LinX-ST can operate with either a single carrier or dual stacked sub-carriers to efficiently increase capacity without requiring any additional equipment. Built-in Radio Link Aggregation (RLA) seamlessly combines traffic from multiple stacked sub-carriers to simplify customer networking.

LinX-ST is easily and inexpensively field convertible to different sub-brands via user friendly customer replaceable diplexers. Radio sparing only needs to include the base radio, resulting in no longer a need to spare radios in specific sub-bands.

LinX-ST is an ideal, highly integrated all-outdoor radio for the most demanding applications.

LinX-ST

Performance

- Up to 1.6Gbps* per radio using stacked dual sub-carriers (higher capacity available with compression enabled or when operating in High Capacity Mode)
- Single carrier or dual stacked sub-carrier operation to efficiently increase capacity without adding more equipment
- QPSK to 4096QAM
- Ultra wide bandwidth operation to 160MHz ANSI and 112MHz ETSI
- 1+0, 1+1 HSB, and 2+0 operation
- Space Diversity and Frequency Diversity available
- Built-in Radio Link Aggregation (RLA) seamlessly combines radio traffic across multiple stacked sub-carriers
- Built-in Advanced Digital Pre-Distortion to drive higher transmission performance
- Customer replaceable diplexers to ease operational logistics and improve system flexibility
- Adaptable antenna interface option supports third party antennas to ease migration and upgrade
- Header and payload compression to further increase capacity
- SyncE and IEEE1588v2
- AES256 encryption
- No-touch WiFi maintenance interface (optional)
- Time based feature license available

Applications

- Whatever your business or the goals for your network infrastructure, LinX-ST can play a critical role in backhaul performance, reliability and security.
- 4G/5G backhaul
- Fiber extension
- Fiber backup
- Leased line replacement
- Small cell backhaul
- Campus connectivity
- Disaster recovery

LinX-ST SINGLE TRANSCEIVER



Features	
Data Throughput Rate *	Up to 1.6Gbps per radio (higher capacity available in High Capacity Mode or with compression enabled) Subject to local regulations.
Configurations	1+0, 2+0, 1+1 HSB, 1+0 SD, 1+0 FD
Radio Link Aggregation	Dual Stacked Sub-Carriers (per Radio)
Frequency Range	6-42GHz
Modulation	QPSK to 4096QAM
Air Interface	Full Duplex FDD
Channel Bandwidths per Carrier	10-160MHz ANSI and 14-112MHz ETSI per Carrier and 10-80MHz ANSI and 14-112MHz ETSI per Stacked Sub-Carrier (x2)
Diplexer	Customer replaceable
Tx Power (diplexer output)	Up to 27dBm with Built-In Advanced Digital Pre-Distortion
Interfaces	
Ethernet	1 x 1G RJ45 (POE), 1 x 1G SFP or 1 x 1G RJ45 (POE), 2 x 1/2.5G SFP
Console	<ul style="list-style-type: none"> • USB serial port • WiFi for no-touch maintenance (optional)
Ethernet	
Max Packet Size	16000 bytes (Jumbo Frame)
Ethernet Timing and Synchronization	SyncE (G.8261), IEEE 1588V2 Transparent, Boundary, and Ordinary Clock support
Ethernet Features	<ul style="list-style-type: none"> • IPv6, IPv4 • L2- 16K MAC Addresses • 4096 VLAN (IEEE 802.1Q) with 1024 VLANs supported concurrently • VLAN tag translation on ingress or egress • Provider Bridging (IEEE 802.1ad, Q-in-Q) • RSTP / MSTP
Ethernet Compression	IFG and Pre-Amble Suppression, Header Compression, Payload Compression
QoS Packet Classification	<ul style="list-style-type: none"> • DiffServ (RFC 2475) • VLAN PRI (IEEE 802.1Q-2003) • MAC PRI • Port Priority • Port Number, Protocol • MPLS PRI
QoS Packet Scheduling	<ul style="list-style-type: none"> • Port – Weighted Round Robin (WRR) • Logic Port (cluster) – Weighted Fair Queuing (WFQ) or Strict Priority (SP) • Priority Queue – WFQ, Strict Priority • 8 priority queues per logical port/queue
QoS Congestion Avoidance	Two-rate / three color marking, WRED, Policing, Flow-Control (PAUSE packets, back-pressure)
QoS Traffic Shaping	Configurable
Ethernet Protection	ITU-T G.8032 Ring
Encryption	AES256
OAM	ITU-T Y.1731, IEEE 802.1ag, 802.3ah, Radius, Syslog
MEF Compliance	MEF9 Services Test Suite, MEF14 Traffic Management Test Suite
Mechanical and Environmental	
Input Power Requirements	Direct DC (±36 to 60 VDC) or POE (±44 to 57 VDC or 100 to 240VAC)
Weight	6.1kg (13.4lbs)
Size	22.6 cm x 22.1 cm x 11.6 cm (8.92" x 8.72" x 4.55")
Operating Temperature	-33°C to +55°C (-27°F to +131°F) per ETS 300 019-2-4 Class 4M5
Humidity	5%-100%
Weather	IP67 / All Weather
Safety	IEC/EN 62368-1, IEC/EN 60950-22
Regulatory	US FCC Part 101, FCC Part 15B; ETSI EN 302 217

Note: Throughput based on RFC2544 data, 1518 byte packets, IFG & Preamble are excluded. Actual throughput will depend on link conditions and local regulations. Specifications are typical and subject to change without notice.