



LTS-12 Radio

LTS Telemetry Product

The LTS-12 Radio is a configurable radio transmitter which can be used as a field transmitter, repeater or base station. Easy to use configuration software makes the unit an important part of any Radiation Protection Remote Monitoring System.

✓ CORE CAPABILITIES

- **Functional Versatility:** The LTS-12 interfaces with over 70 instruments from leading manufacturers via DE-9 wired connections or Bluetooth®-enabled wireless devices.
- **Radio Uplink Capability:** Equipped with high-power 2.4 GHz or 900 MHz Frequency Hopping Spread Spectrum (FHSS) radios, the LTS-12 transmits data over long distances and can relay information through LTS-06 mesh devices to extend wireless range.
- **Compatibility:** Compatible with all devices using Charthouse Mesh Radio. Supports Bluetooth® Low Energy devices.
- **Secure Wireless Encryption:** Instrument data is transmitted securely using integrated encryption, with optional FIPS-140 certified algorithms for enhanced protection.



RADIO & GPS PERFORMANCE SPECIFICATIONS

LOCAL MESH RADIO PERFORMANCE	Frequency	ISM 2.4-2.5 GHz
	Transmit Power Output	1.75 mW
	Range Indoor/Urban	Up to 200' (60 m)
	Range Outdoor/Line of Sight	Up to 100' (30 m)
	RF Data Rate	250,000 bps
	Receiver Sensitivity	-102.1 dBm
	FCC Part 15.247	QOQMGM13P
	Industry Canada (IC)	5123A-MGM13P
BLUETOOTH RADIO PERFORMANCE	Frequency	2400-2483.5 MHz
	Transmit Power Output	1.75mW
	Range Line of Sight	Up to 100' (30 m)
	Receiver Sensitivity	-97.4 to -102.1 dBm
	FCC Part 15.247	QOQMGM13P
	Industry Canada (IC)	5123A-MGM13P
GPS PERFORMANCE	General	GPS L1 frequency, GLONASS L1, SBAS L1 99 acquisition channels, 33 tracking channels WAAS/EGNOS/MSAS/ GAGAN enabled
	Cold Start Time To First Fix (TTFF)	Typical 35s
	Accuracy	Position: < 3.0 m Velocity: 0.05 m/s Time: 10 ns RMS
	Sensitivity	Acquisition (cold start): -148 dBm Tracking: - 165 dBm Re-Acquisition (hot start): - 163 dBm

OPTIONAL RADIO: HP MESH

HIGH POWER 802.15.4 RADIO PERFORMANCE	Frequency	ISM 2.4-2.5 GHz
	Transmit Power output	79 mW
	Range Indoor/Urban	Up to 500' (150 m)
	Range Outdoor/Line of Sight	Up to 0.6 mile (1 km)
	RF Data Rate	250,000 bps
	Receiver Sensitivity	-102.1 dBm
	FCC Part 15.247	QOQMGM13P
	Industry Canada (IC)	5123A-MGM13P

OPTIONAL RADIO: DIGI XR

900MHZ XR RADIO PERFORMANCE	Frequency	902 MHz – 928 MHz 915 MHz – 928 MHz
	Transmit Power output	79 mW
	Range Indoor/Urban	Up to 460ft/up to 3km (1.8mi)
	Range Outdoor/Line of Sight	Up to 15km (10mi)
	RF Data Rate	110,000 bps
	Receiver Sensitivity	-108 dBm (110 kbps)
	FCC Part 15.247	MCQ-XB9XR
	Industry Canada (IC)	1846A-XB9XR

OPTIONAL RADIO: DIGI XTEND

900MHZ XTC RADIO PERFORMANCE	Frequency	ISM 902 to 928 MHz
	Transmit Power output	500 mW
	Range Indoor/Urban	Up to 500' (150 m)
	Range Outdoor/Line of Sight	Up to 7 miles (8.0 km)
	RF Data Rate	125,000 bps
	Receiver Sensitivity	-110 dBm (9600 bps)
	FCC Part 15.247	MCQ-XBPSX
	Industry Canada (IC)	1846A-XBPSX

GENERAL SPECIFICATIONS

POWER REQUIREMENTS	Internal Battery	4 x AA cell
	Battery Voltage	4.0 – 6.9 VDC
	External Voltage	4.0 – 36.0 VDC
	Current	3A peak. 1A continuous Tx. 300mA local radio, GPS
PHYSICAL PROPERTIES	Dimensions (HxWxL) excluding antenna	15.0 x 10.0 x 4.0 cm
	Weight excluding batteries	220 grams
	USB Connector	Micro-USB
	Serial Connector	DE-9 Male
	Operating Temperature	-40 to 50°C
ANTENNA	Connector	RP-SMA Female (requires antenna with RP-SMA plug) Internal Board Mounted (low power radio)
	Impedance	50 ohms

CONTACT

AMERICAS

Charthouse Data Management LLC

11720 Amber Park Dr,
Ste 160 PMB 1047,
Alpharetta, GA 30009
+1 (678) 935 0104
support@charthouseusa.com

WORLDWIDE

Charthouse Data Management Ltd.

Unit A17, St Vincent House,
Admiralty Park, Station Rd,
Holton Heath, Poole, Dorset,
BH16 6HX, UK
+44 (1202) 031444
support@charthouse.co.uk

DISTRIBUTOR

Advetage Solutions

111 Penn Street, Suite 202
El Segundo, CA 90245
+1 (424) 292-8432
info@advetage.com