

TX-E Connect - Outdoor

Product Specification | **DRAFT** | March 2026

1. Product Overview

The TX-E Connect - Outdoor is a weatherproof NAT router designed for external deployment, bridging Wi-Fi HaLow (IEEE 802.11ah) and 2.4 GHz Wi-Fi networks. It shares the dual-mode flexibility of the Connect - Internal — either radio can serve as the network uplink — and adds an outdoor-rated ASA enclosure, an extended-range 8 dBi HaLow antenna, and enhanced 2.4 GHz coverage for broader site connectivity.

With a target HaLow range of 1.5 km line of sight and support for up to 10 connected devices, the Connect - Outdoor is suited to farms, construction sites, remote facilities, and other outdoor deployments. It is powered via USB-C and managed through the TX-E Connect mobile application over Bluetooth.

2. Key Features

- Dual-mode NAT router — selectable HaLow or 2.4 GHz uplink
- Extended HaLow range targeting 1.5 km line of sight
- 8 dBi HaLow antenna via Type N connector
- Enhanced 2.4 GHz coverage via internal PCB antenna
- Supports up to 10 simultaneous client connections
- Weatherproof ASA enclosure
- Wall and pole mount options
- USB Type-C powered
- Managed and updated via TX-E Connect over Bluetooth

3. Wireless Specifications

Wi-Fi HaLow (IEEE 802.11ah)

Standard	IEEE 802.11ah (Wi-Fi HaLow)
Bands	915 MHz (US, Canada) / 920 MHz (AU, NZ, Japan)
Target Range	1.5 km (line of sight)
Max Range	Exceeds 1.5 km under optimal conditions
Upload	~5 Mbps
Download	~6 Mbps
Antenna	8 dBi external, Type N connector

2.4 GHz Wi-Fi (IEEE 802.11 b/g/n)

Standard	IEEE 802.11 b/g/n
Frequency	2.4 GHz ISM band
Antenna	Internal PCB antenna

4. Networking

Mode A	HaLow uplink (WAN) + 2.4 GHz AP (LAN)
Mode B	2.4 GHz uplink (WAN) + HaLow AP (LAN)
Max Clients	10 devices
Routing	IPv4 NAT
DHCP	Server on LAN interface
Throughput	~5 Mbps upload / ~6 Mbps download

5. Power

Connection	USB Type-C
Input Voltage	5 V DC
Idle	0.75 W (150 mA)
Active TX	2.25 W (450 mA)

6. Physical

Enclosure	ASA plastic
IP Rating	Weatherproof (specific rating to be confirmed)
Mounting	Wall and pole mount options
Dimensions	To be confirmed
Operating Temp	-20°C to +75°C
Storage Temp	-30°C to +85°C

7. Mobile Application

App Name	TX-E Connect
Platforms	iOS and Android
Connection	Bluetooth LE (BLE 5.0)
First-Time Setup	Uplink mode selected on first connection
Configuration	Network settings, device status
Firmware Updates	Wirelessly via TX-E Connect over BLE

8. Regulatory

Certifications	FCC and RCM (in progress)
Markets	US, Canada, Australia, New Zealand, Japan

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