



## 8-Channel LoRa Gateway

Long-Range Connectivity Made Easy



The OxTech **Carbon 8-Channel Gateway** is a highly scalable and customizable LoRaWAN compatible gateway used to construct public or private networks for capturing and analyzing critical data.

### ULTRA LONG-RANGE

Up to 10-mile wireless range maximizes your investment requiring fewer gateways to build your network.

### DESIGNED FOR SCALE

Ensure future sensor and network integrations with OTA updates, extensive customization options, and multi-network compatibility.

- Powered by the Semtech SX1303 Integrated Chipset
- LoRaWAN Class A/B/C
- Integrated wall-mount installation
- Pre-configured for the **OxTech Dashboard**
- Built-in Battery Backup
- Indoor Class B option\*
- Local integrated LoRa Network Server (LNS)\*\*

### ULTIMATE RELIABILITY

Industrial-grade components and ultra-low power requirements minimize the need for hands-on maintenance and reduce device downtime.

### USER-FRIENDLY INSTALLATION

Intuitive installation, flexible mounting options, easy app-based setup and configuration with cellular activation reduce on-site provisioning time.

\*With OxTech Carbon GPS Relay  
\*\*Available Q3 2023

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## Product Specifications

Processing Unit	ESP32-D0WD-V3 by Espressif Systems
LoRa	North America US915, 8-Channels
Bluetooth	Bluetooth v4.2 Low Energy (BLE)
Wi-Fi Backhaul	802.11 b/g/n 2.4GHz
Ethernet Backhaul	10/100
Cellular Backhaul	LTE-M (Cat M1)
GNSS	GPS, GLONASS, Galileo, BDS, QZSS
Dual SIM	M2M Embedded eSIM (MFF2)* and SIM Card (4FF/Nano)
Input Voltage	12VDC @ 2.0A
Battery Backup*	Rechargeable lithium-ion 18650 Battery
POE*	POE+ (12V/26W)
Security	Secure boot with ECDSA Public/Private key pair Hardware-based secure element Proprietary firmware encryption
External Antennas	LoRa (915): 2.8dBi 8" (200mm) Omnidirectional Cellular: 5dBi 8" (200mm) Omnidirectional
Certifications**	FCC   IC   PTCRB

\* Optional

\*\* In progress

## Physical Description

Dimensions	5.5" x 6.25" x 1.25" (140 x 158 x 31.7mm) without Antenna
Weight	0.74 lbs (11.9oz / 336g)
Operating Temperature	32° to 140° F (-0 to 60 °C)
Storage Temperature	-40° to 300° F (-40 to 150 °C)
Humidity	10% to 90% RH (Non-condensing)

**Prototype specifications and images shown. Production models may vary.**

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