



SDI 7510-64

64-channel outdoor LoRaWAN IoT gateway

Benefits

- Carrier-class LoRaWAN® connectivity
- Scales to greater than 12 million messages/day
- Environmentally hardened (IP68-rating) for outside plant deployments
- Full duplex operation
 - 72 RX channels
 - 8 TX channels
- Supports an external LoRa antenna for greater coverage
- PoE+ (802.3at) or local power -48V DC
- Multiple backhaul options – Ethernet, fiber, LTE, Wi-Fi
- Mobile app-enabled configuration and embedded management

Overview

The Adtran SDI 7510-64 is a highly scalable carrier-class outdoor LoRaWAN® based Internet-of-Things (IoT) gateway. Designed for long-range, low-power wide area networks (LPWAN), the Adtran SDI-7510-64 outdoor IoT gateway is ideal for both high-density, and long-range environments, offering high-reliability and durability. The SDI 7510-64 outdoor gateway leverages Adtran's decades of experience in deploying carrier-class outside plant solutions for service providers and large enterprises.

Carrier-class, highly scalable

The SDI 7510-64 is a compact outdoor gateway, that supports full duplex 72 receive channels and 8 transmit channels that scales to greater than 12 million messages per day. Adtran's patent-pending RF filtering and distribution architecture provides an innovative solution offering RF isolation and protection for years of reliable trouble-free service. The IP68-rated gateway supports an external LoRa antenna and an integrated GPS antenna for location and timing. Backhaul options, include Ethernet, fiber, LTE, and Wi-Fi, enabling a wide range of revenue generating IoT services.

The SDI 7510-64 IoT gateway can be powered by either 802.3at (PoE+) or a -48VDC power source. All of the features combine to provide a reliable connection to a public or private LoRaWAN networks.

Powerful yet power efficient

LoRaWAN protocol, developed by the LoRa Alliance®, is a low-cost, low-power wireless network ideal for long-range indoor and outdoor IoT applications. LoRaWAN uses the sub-GHz unlicensed spectrum and has a range of up to 15kms, making it the perfect choice for smart metering, asset tracking, smart city, smart tag and smart manufacturing applications. dedicated, battery-powered sensors. LoRaWAN is the leading open IoT standard with a world-wide ecosystem of sensors, gateways, network servers, operators and solutions. Once a LoRaWAN network is established, multiple overlaying IoT applications can share the same network.

Administration

Configuring an Adtran SDI 7510-64 has never been easier. The 7510-64 is easily configured via an Apple® iOS-based or Android-based app. Simply download the Adtran IoT app from the Apple App Store® or the Google Play Store, log in to the device and instantly get access to the gateway. The mobile app provides you the ability to check system status, Ethernet configurations, and configure the LoRa Radio and sub-bands. In addition, there is an embedded web GUI that extends management capabilities to allow detailed management and configuration of the gateway.

SDI 7510-64

Product specifications

LoRaWAN interfaces

- ISM NA915 band
 - 902 – 928 MHz
- Full duplex operation
- 72 RX channels
 - 64 125MHz RX channels
 - 8 500MHz RX channels
- RX sensitivity
 - -127dBm at SF7 BW 125kHz
- 8 TX channels
- Max TX power
 - 30 dBm

Backhaul interfaces

- 10/100/1000BaseT
- SFP interface (Fiber/PON)
- LTE
- Wi-Fi (802.11b/g/n/ac)

Status LEDs

- Power
- LoRa
- Network

Antennas

- External
 - LoRa
- Internal
 - GPS
 - LTE
 - Wi-Fi/Bluetooth

Administration

- iOS app
 - iOS 14.1 or higher
- Android app
 - Android 9.0 or higher
- Embedded Web GUI
 - CLI

Physical

- Chassis: Outside plant enclosure
- Mounting: Wall, pole, tower, and H-frame
- Dimensions: 14.2" (36,1cm) x 8.16" (20,7cm) x 5.11" (13cm) (H x W x D)
- Weight: 9lbs/4.1kg

Power

- PoE+: 802.3at
- 48VDC
- Power Draw
 - Typical: 10 Watts
 - Max: 15 Watts

Environmental

- IP-68 rating (dust and waterproof)
- Operating Temperature: -40° to 70°C (40° to 158°F)
- Storage Temperature: -40° to 85°C (-40° to 185°F)
- Relative Humidity: Up to 95%, non-condensing

Regulatory compliance

- FCC Part 15
- RSS-GEN, RSS-247
- UL/CUL NRTL Listed
- RoHS Compliant

Warranty

- 1-year Warranty
- Includes access to phone product support

Ordering information

Equipment	Part No.
Adtran SDI 7510-64 Outdoor LoRaWAN gateway	17101319F1



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