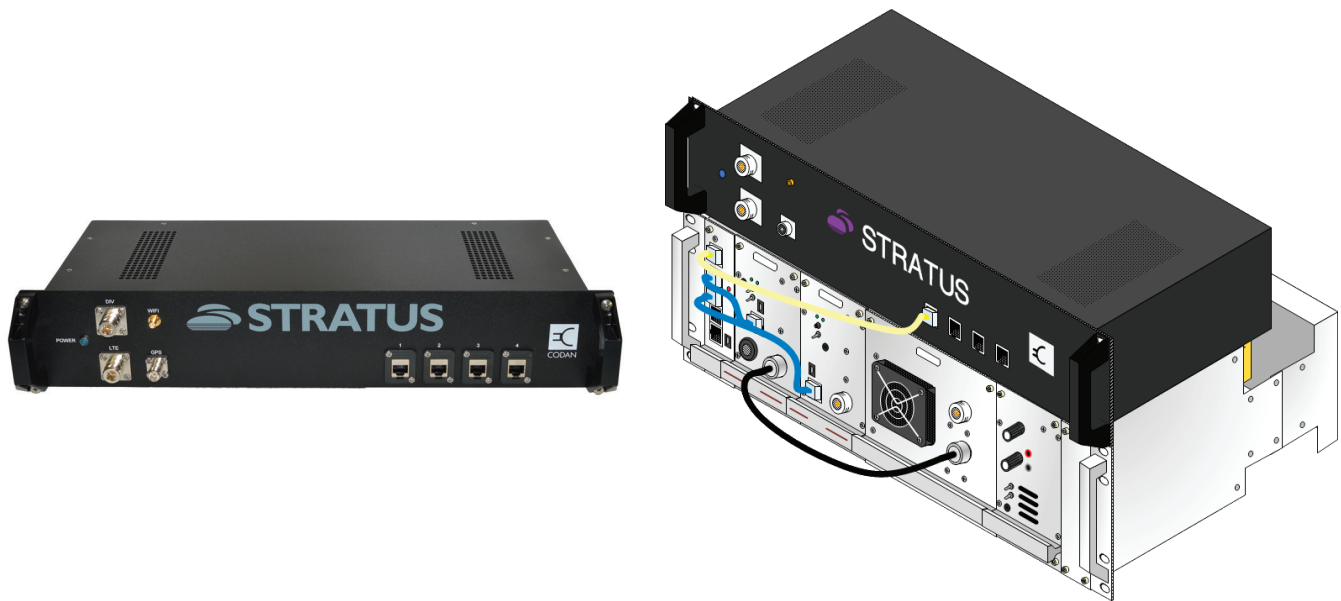# TN761 Stratus Fixed Infrastructure Radio System

A Stratus Fixed Infrastructure Radio System supports analog and transparent P25 digital (clear or secure) repeat capability and incorporates a Sierra Wireless cellular modem to backhaul P25 Digital Fixed Station Interface (DFSI) compliant signalling across existing cellular 3G or 4G Long Term Evolution (LTE) infrastructure. The cellular backhaul can be used to interconnect multiple Stratus repeaters / base stations to each other, or to P25 DFSI compliant consoles. This interconnectivity is achieved via a Stratus controller which acts as an arbitrator for multiple DFSI interconnects.



Up to four Codan UIC controllers can be linked to a single Stratus Fixed Link Infrastructure device at each site, enabling multiple systems to take advantage of the Stratus Fixed Infrastructure capabilities.

Stratus Fixed Infrastructure can be easily added to existing MT-4E equipment by the addition of a Stratus Fixed Infrastructure upgrade which includes the UIC card, DFSI firmware, and the Stratus Fixed Link Infrastructure equipment which includes full cellular capability (modem and antenna) and a 4-port ethernet switch.

Stratus Fixed Infrastructure provides the opportunity to remove the dependence on costly leased telco lines and T1 connections at a fraction of the cost.

The current draw of the Stratus Fixed Link Infrastructure (not including MT-4E) is 500 mA to 750 mA @ 13.8 VDC

# TN761 Stratus Fixed Infrastructure Radio System

The Stratus Fixed Link Infrastructure includes the following:

- 2 RU (rack unit) harware mounting shelf.
- 6 to 34 VDC input power supply.
- 2 N-type 3G/4G LTE Antenna connectors (2nd connector is for a diversity antenna).
- 2 690 - 2700 MHz 3G / 4G LTE wall-mount omni-directional groundplane independant antennas (2 dBi gain).
- SMA connector for Wi-Fi antenna.
- BNC connector for GPS antenna (future capability).
- 4-port ethernet switch.
- cellular modem.
- front panel power LED.

Part numbers for the Stratus Fixed Infrastructure are as follows:

| | |
|---|---|
| LMR-STRATUS-FPXXX | Stratus Fixed Link with MT-4E radio system (30 Watt P25 capable system) |
| LMR-STRATUS-FIXUP | Stratus Fixed Link upgrade to existing MT-4E radio system |

The Stratus Fixed Link Infrastructure is 19" rack mountable, 2 RU (3.5" / 8.8 cm) high and 7.5" (19 cm) deep, and weighs 10.5 lbs. (4.6 kg).

The Stratus cellular modem is carrier specific and is also available with optional Wi-Fi capability  The modems operate on carriers and Wi-Fi as follows:

| | | | |
|---|---|---|---|
| CI-MODEM-01 | Telus / Bell / Rogers | CI-MODEM-W1 | Telus / Bell / Rogers (Wi-Fi capable) |
| CI-MODEM-02 | AT&T | CI-MODEM-W2 | AT&T (Wi-Fi capable) |
| CI-MODEM-03 | Verizon | CI-MODEM-W3 | Verizon (Wi-Fi capable) |
| CI-MODEM-04 | International | CI-MODEM-W4 | International (Wi-Fi capable) |
| CI-MODEM-05 | Sprint | CI-MODEM-W5 | Sprint (Wi-Fi capable) |

This product has been discontinued and is no longer manufactured by Codan Communications

## TN761 Stratus Fixed Infrastructure Radio System

The Stratus Fixed Link case with the lid removed is shown in Figure 1.  This shows how cellular modem, ethernet switch and power supply are mounted inside of the Stratus Fixed Link case.
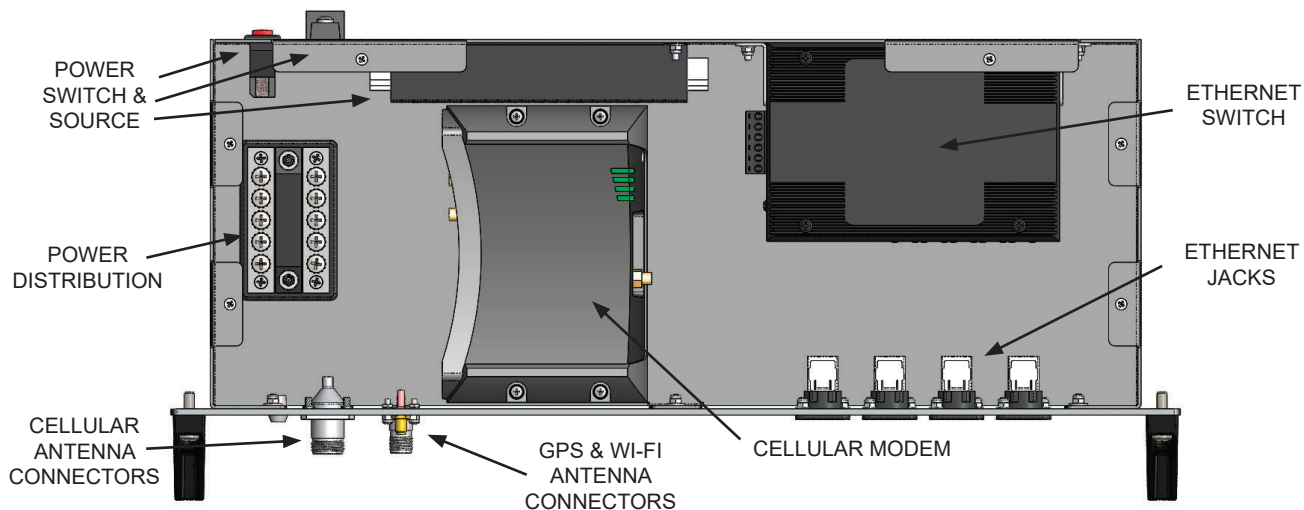


POWER SWITCH & SOURCE

POWER DISTRIBUTION

CELLULAR ANTENNA CONNECTORS

GPS & WI-FI ANTENNA CONNECTORS

CELLULAR MODEM

ETHERNET SWITCH

ETHERNET JACKS

*Figure 1:  Stratus Fixed Link case with case lid removed*

Stratus Fixed Link Infrastructure includes two 3G / 4G LTE waterproof omni-directional groundplane independant antennas with 2 dBi of gain. These antennas include a steel zinc plated finish L-Bracket for wall mounting.  The antennas have N-Female connectors and a white UV-resistant sheath.



*Figure 2:  3G / 4G LTE omni-directional antennas*

<div style="writing-mode: vertical">This product has been discontinued and is no longer manufactured by Codan Communications</div>

## TN761 Stratus Fixed Infrastructure Radio System

**This Page Intentionally Left Blank**