☰CODAN
RADIO COMMUNICATIONS

PROCOM CORPORATION
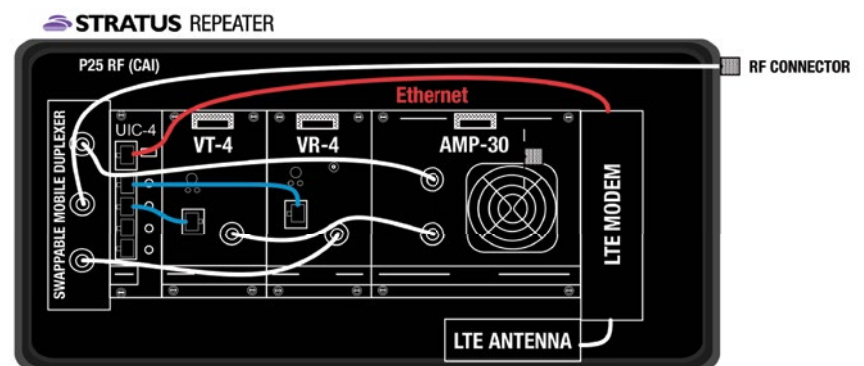CONNECTING PEOPLE AT MOMENTS THAT MATTER

STRATUS REPEATER

↗ FEATURES AT A GLANCE

CODAN Stratus™ is the first deployable P25/LTE hybrid solution that leverages the strengths of both technologies to provide secure mobile voice networks. The Stratus P25 repeaters support transparent end-to-end encryption across an entire communications network.

P25 COMMUNICATIONS OVER LTE

Housed in a rugged Pelican case, Stratus integrates a VHF, UHF, 700 MHz, or 800 MHz repeater, Universal Interface Card (UIC) and LTE modem, linking instantaneously into established communications networks without requiring a hard wired Ethernet connection.

- **Deployable P25 Repeater with optional 4G LTE interface (with fallback to 3G)**
- **Secure mobile voice network**
- **IP linking over LTE to P25 DFSI consoles and other Stratus repeaters**
- **No hardwired Ethernet connection required**
- **VHF/UHF coverage in buildings and any outdoor location**
- **Quickly add and remove repeaters on the network**
- **Rugged, transportable case**
- **Rapidly deployable**
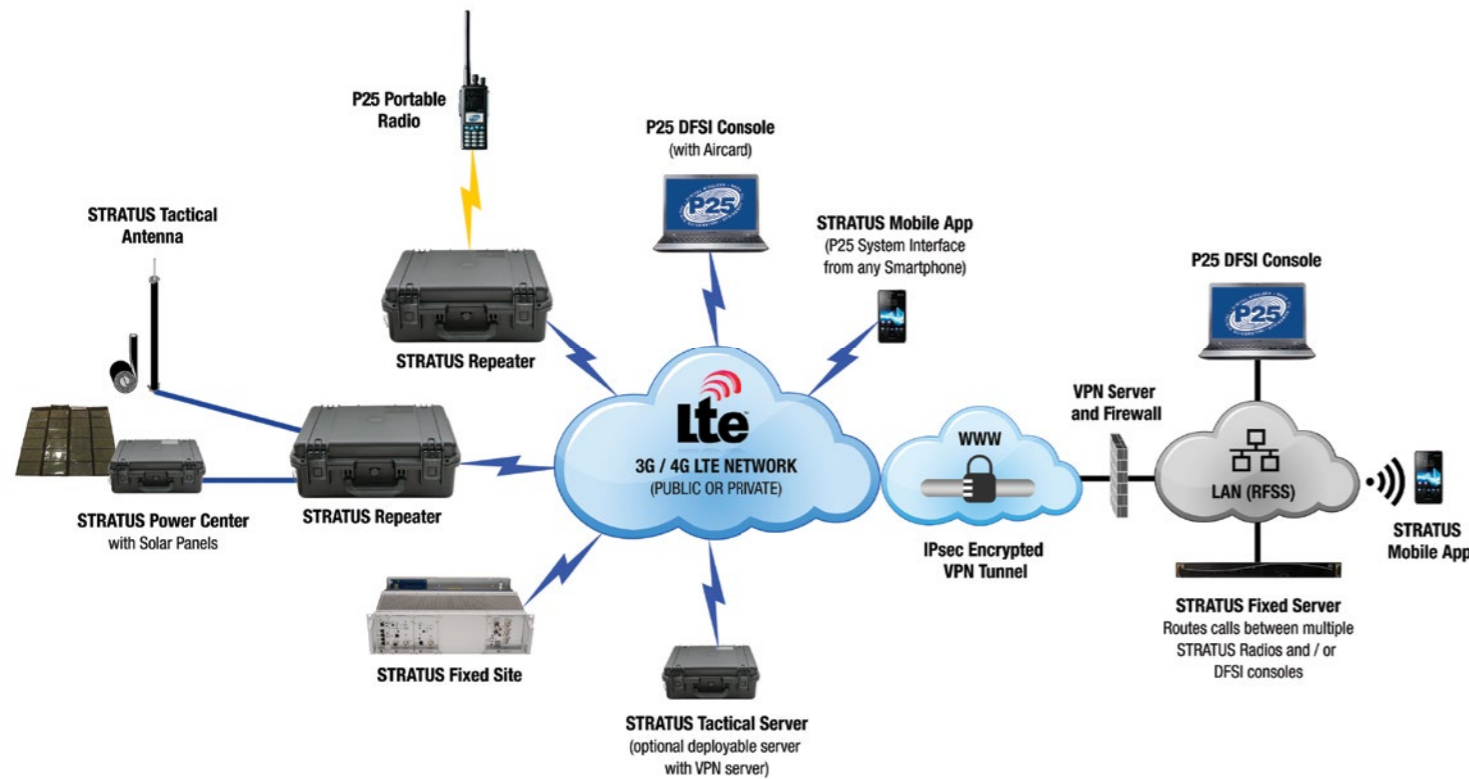- **IP 65 Rated**
- **MIL-STD-810G pending**

IN-BUILDING COVERAGE WITH EXTERNAL COMMUNICATIONS LINK

The P25 repeater provides reliable communications coverage within a building while the LTE modem provides a reliable and secure bridge to an existing P25 communications network. This ensures the repeater is not isolated from the P25 network.

RAPID VOICE NETWORK DEPLOYMENT

Stratus enables a new, secure voice network to be deployed in an instant. A lightweight and transportable design, multiple Stratus repeaters can be deployed at a site by simply locating the repeaters in the required coverage area and powering on. The Stratus repeaters will automatically link with each other over LTE and to the P25 console via the Stratus Server on a private or public network anywhere in the world.

STRATUS NETWORK CONFIGURATION

STRATUS FAMILY PRODUCTS

STRATUS FIXED/TACTICAL SERVER

Based on Codan Digital Link Controller technology, the Stratus Fixed Server is situated at a fixed location anywhere in the world with an Ethernet connection. The Stratus Tactical Server is housed in a rugged, transportable case for quick deployment. Always available and accessible, a Stratus Server will route calls between multiple Stratus Repeaters. The Server receives the digital audio and control signals from the VHF/UHF repeaters via the Ethernet and LTE link and routes the P25 communications within the network, with all encrypted calls routed transparently.

STRATUS CONSOLE

The Stratus Console is for remote configuration and monitoring of the Stratus Repeater functions. The open standard P25 interface of the Stratus Network ensures all third party DFSI consoles are interoperable with the network.

STRATUS MOBILE APP

The Stratus Mobile app enables interfacing to a LMR P25 network from any smartphone. Each smartphone running a security code authorized instance of the Stratus Mobile app can be configured to act as a P25 subscriber unit.

STRATUS RAPID ANTENNA

The Stratus Rapid Antenna is a compact, lightweight and robust rapidly deployable antenna solution. The antenna is hung enclosed within a hollow mast made of composite material that transports as a flat coil then rapidly expands into a rigid mast with a total step time of approximately two minutes.

STRATUS POWER CENTER

The Stratus Power Center is a 35 A hour battery housed in a compact and rugged transportable case for power support of the Stratus Repeater. The power center provides a 12 V DC power source to the Stratus repeater. The battery in the power center is charged and maintained by a 15 V DC input from an AC/DC 15 V DC power supply or Solar panel.

QUICK NETWORK EXPANSION

A Stratus repeater can be quickly added to an established network without any setup required by the user. A Stratus will automatically connect into the network over the LTE connection and establish a link with the dispatch console for immediate tracking and control and instant communications for the user.

SPECIFICATIONS

Repeater bands	136-174, 380-520, 768-869, 896-960 MHz
Encryption	DES-OFB / AES-256 (FIPS certified)
Modes of operation	Analog, P25, Mixed Mode, LTE, 3G
Size	19.2" L x 15.2" W x 7.3" D (48.8 cm L x 38.6 cm W x 18.5 cm D)
Weight	32 lbs (14.5 kg)
Operating temperature	−40°C to + 60°C (100% Duty Cycle — lid open) −40°C to + 40°C (100% Duty Cycle — lid closed) + 40°C to + 50°C (50% Duty Cycle — lid closed)
Over temperature alarm protection	Turn Off Radio at +67°C, Turn On Radio at +64°C
RF power outputs	Low Power Switching (VHF / UHF only): 12 to 30 W adjustable (15 W standard) 25 W (700 MHz / 800 MHz)
DC power inputs	10 to 16 V DC
AC power inputs	110/220 VAC (auto-switching) external power supply
Current draw	750 mA ±10% (VHF/UHF) 7.0 A ±10% (VHF/UHF)
Voltage protection circuit	Shut-off at 9.0 V DC, turn on at 11.0 V DC
Internal duplexer frequency separation	136–174 MHz VHF: 4.5 MHz separation 400 MHz UHF: 5.0 MHz separation 700 MHz UHF: 30 MHz separation 800 MHz UHF: 45 MHz separation
LTE modem options	700 MHz Band 13 LTE with fallback to 800/1900 MHz EV-DO 700 MHz Band 17 LTE & AWS Band 4 LTE with fallback to 850/1900 MHz HSPA+
Carrier approvals	Approved for deployment by Verizon, AT&T, Sprint, Rogers, Bell, Telus, Telstra
Additional ethernet ports	2 RJ45 Ethernet ports
VPN/security	IKE Encryption - AES-256 capable IPsec, SSL, and GRE VPN Client Up to 5 VPN Tunnels Trusted IP MAC Address Filtering
Environmental	MIL-STD-810 IP65