

UNIFIED COMMUNICATIONS ROUTER



FEATURES AND BENEFITS

- **Ease of Use... One Handset, Multiple Devices**
- **Press-To-Talk over IP (Cellular, Satellite, etc)**
- **Extends Vehicle Communications to Field Users**
- **Distributed Satellite Positioning System (GNSS)**
- **Emergency GNSS and ID Pass-Through**
- **Designed and Manufactured in Australia**
- **Powerful & Expandable Linux OS**
- **Compact, Rugged & Weatherproof Design**

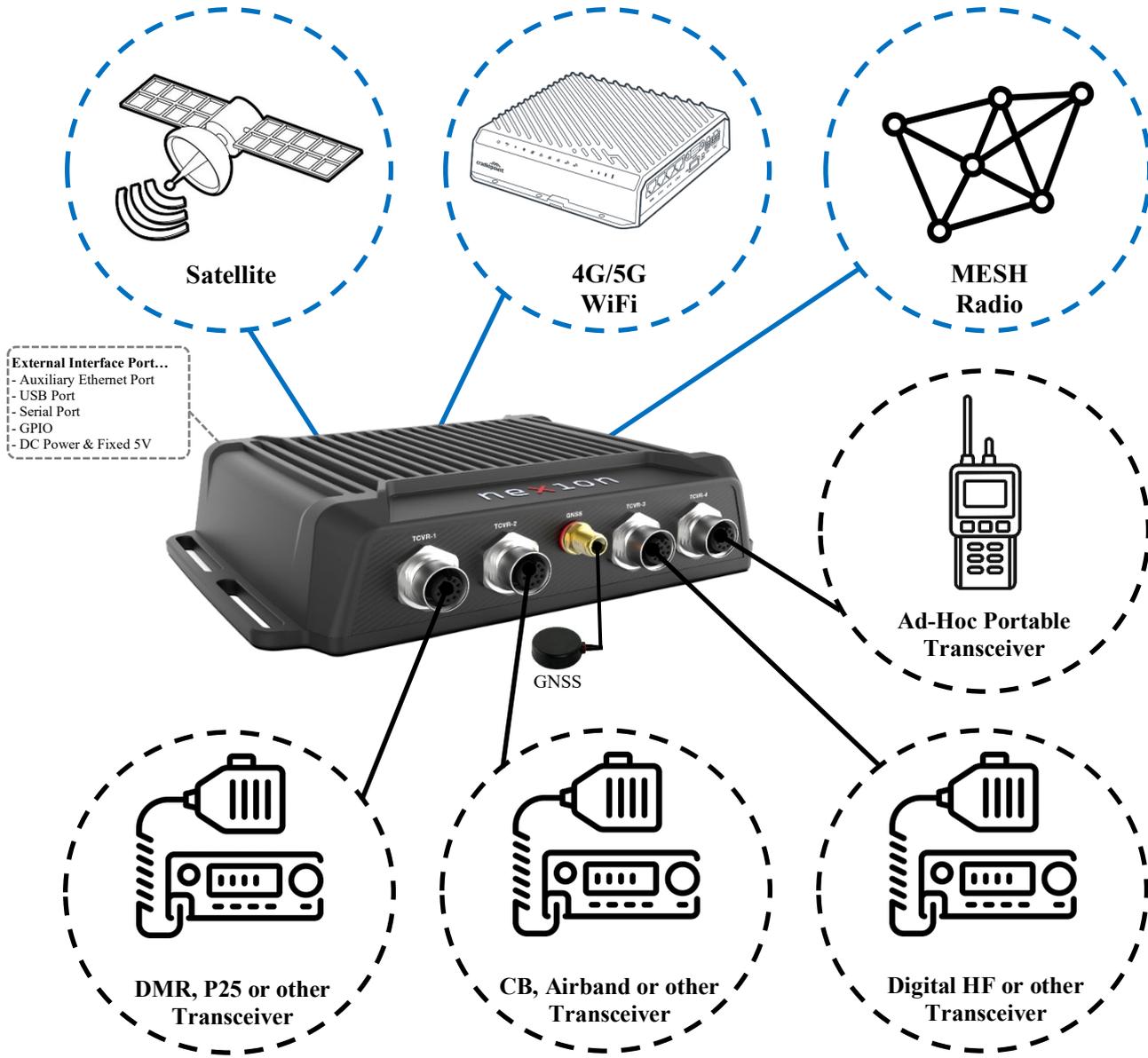
BRIDGING ANALOGUE AND DIGITAL NETWORKS AND TECHNOLOGIES...

When teamed with compatible radios and devices, *SmartPATCH™* unifies and creates a simplified Communications Ecosystem, providing automation, reduced training costs, enhanced diagnostic capabilities and seamless migration to new or additional technologies.

As a stand-alone Interoperability (InterOp) device, SmartPATCH 'Unifies' up to four traditional Press-To-Talk based devices, operating on various technologies, such as Analogue, DMR, P25 Digital Conventional and P25 Trunked using a variety of connectivity methods, including Analogue, Digital (USB & RS-232) and Ethernet/IP.

Other features include Primary or Slave modes, LEO and GEO Satellite and MESH Radio compatibility, P25 Tier 2 Location Services, Automated Vehicular Repeat functionality and an External Interface Bus for specific customer requirements, such as Accident and Roll-Over Reporting, Lights and Siren Reporting and CAN Bus Interface and Reporting.

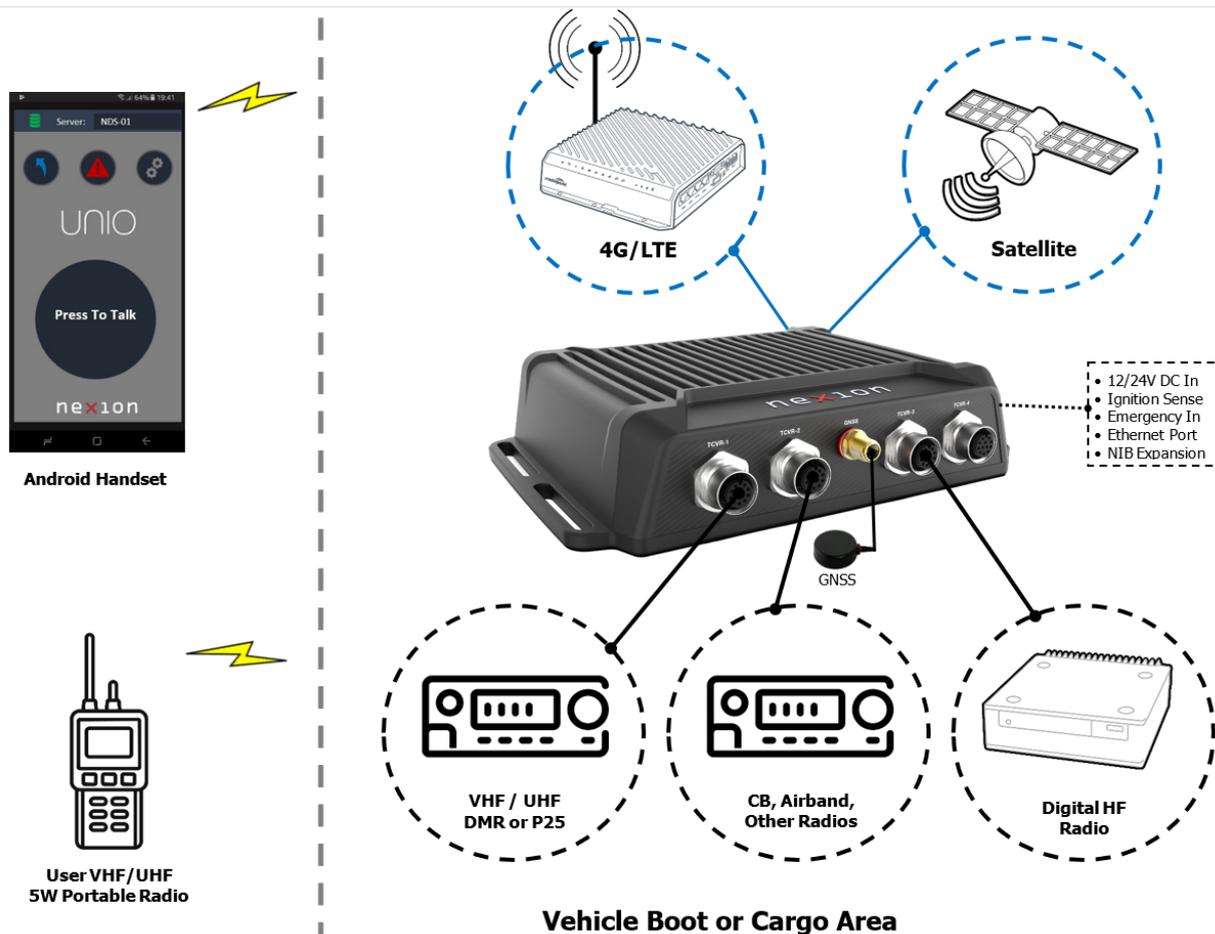
CONNECTIVITY...



CONTROLLER MODES...

<p>Standalone For Fixed, Quick-Deploy or Transportable Use</p>	<p>Transceiver Control Under direct control of a compatible transceiver (compatible devices only)</p>	<p>PTT Handset Single Handset control of the entire system</p>	<p>Android Handset Smartphone control of the entire system (requires WiFi AP)</p>

ANDROID VEHICLE MODE EXAMPLE[†]...



ANDROID MODE - BEFORE AND AFTER EXAMPLE...

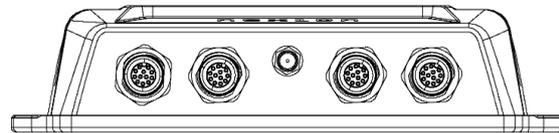
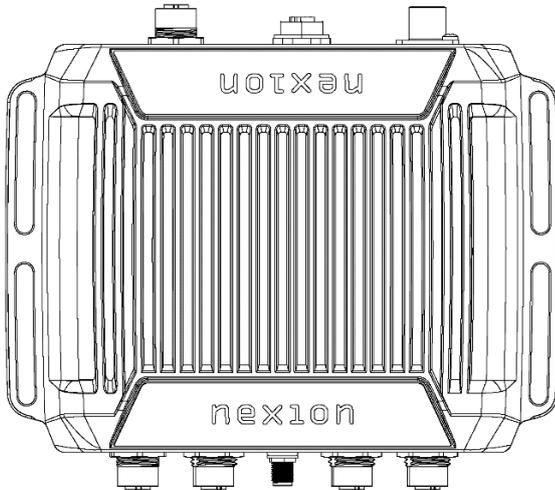


**TYPICAL RURAL VEHICLE
(5 COMMUNICATIONS HANDSETS/DEVICES)**



**SMARTPATCH IN APP MODE
(SINGLE CONTROL OF 5 DEVICES)**

PHYSICAL SPECIFICATION...



Size: 182mm(L) x 42mm(H) x 135mm(W), excluding connectors
Weight: 880g (without cables, without accessories)

ELECTRICAL SPECIFICATIONS...

Radio Ports

- Digital Connectivity (Radio Control)
- Analogue Connectivity

- Input Levels

- Output Levels

- General Purpose Input/Output (GPIO)

- Remote Power Input Control

- Remote Power Output Control

- Analogue Signal-Processor / PMR-DSP

Analogue / Digital Routing

Ethernet Port

NIB Expandability

Routing Modes

Devices Tested to Date

OS / Main-Processor

GNSS Receiver

Operating Temperature

Relative Humidity

Primary Power / Consumption

Up to 4 (using Industrial M12-12 Circular Connectors)
 Configurable: 4x RS232 Control of attached Radios or 3x RS232 + 1x USB
 Balanced Audio In (600 Ohm), Un-Balanced Audio Out (600 Ohm),
 PTT Out (Active Low) and BUSY In (Active High or Low)
 -20dBm to +6dBm (-10dBm nominal)
 -20dBm to +6dBm (-10dBm nominal)
 Two, configurable for Active-High or Active-Low
 Remote Power On/Off control of SmartPatch (Active High)
 Remote Power On/Off control of attached Radios (Active High)
 Fixed-Function Signal Processing with Programmable DSP for Voice, Pre/De-Emphasis, Flat Audio, DTMF En/Decode, CTCSS Filter.
 6-Way... 4x Analogue/Radio and 2x Digital (PTToC, VoIP, etc.)
 Dedicated Port using an Industrial M12-4 Circular Connector
 Nexion Interface Bus (NIB) via external Industrial M12-8 Connector
 Single, Dynamic and Automated Modes with Optional Customer Based Rules
 Tait Tx94, Tx93 and TM8x series • Kenwood NX5000 • Icom SAT100M and IC-A120 • Codan NGT SR, SRX and Envoy X2 series • Inmarsat BGAN • X10DR
 Embedded Linux / ARM® Cortex® Quad-Core, 64bit
 72 Channel GPS/GLONASS u-Blox® M8 Engine
 -167 dBm GPS Tracking / Navigation Sensitivity
 < 30 second Time-To-First-Fix for Cold Starts (open sky)
 -20° to +60° C (Extended temperature version available)
 95%, non-condensing
 10-30V ±10% DC / <4 Watts

Important notes...

1. Features and specifications subject to change without notice or obligation.
2. Features and specifications subject to compatible devices and/or services.
3. Not all features or operational modes will be available at Product Launch or as a Standard Inclusion. Some may require 3RD party subscriptions.

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