



Wireless Communication Technology

The Etherstack **IVX IP Radio** provides high-quality, low-latency, voice and data mobile connectivity seamlessly over multiple bearers in a highly compact form-factor.

The IVX connects with up to four LMR devices simultaneously to provide continuous communication over multiple protocols including:-

- P25-Phase I and II, conventional & trunked
- DMR Tier II / III
- NXDN
- TETRA
- Analog HF and FM

Two wired Ethernet interfaces are provided for connection to satellite, or other IP, bearers enabling seamless worldwide connectivity when no terrestrial networks are available and on a Least-Cost Routing (LCR) basis.

An optional, dual-SIM, 3G/4G/5G cellular modem enables connectivity to terrestrial networks and use of LMR protocols over cellular whilst retaining encryption and LMR calling meta-data (e.g. group calling, emergency calling, location data etc).

An additional analog, 4-wire E&M interface, is provided for connection to legacy analog LMR devices and enable cross-protocol repeating.



IVX (Back) - LMR and RF interfaces

| Supported Manufacturers and Service Providers | | | | | |
|---|---|--|--|--|--|
| Cellular | ATT / FirstNet, Bell, Rogers, Telus, T-Mobile, Verizon | | | | |
| LMR | BK Technologies, GME, L3Harris, Icom, Kenwood, Motorola, Simoco, Tait | | | | |
| Satellite | BGAN, Iridium, VSAT, Government, Others | | | | |



| LMR (Digital or Analog) 4x maximum simultaneous | via D-sub Micro-D 15-Way RS232, 4-Wire E&M |
|--|---|
| Ethernet (Satellite) | via 2x 10/100 RJ45 |
| Cellular (3G/4G/5G) | via 2x SMA Female |
| WiFi / Bluetooth | via 1x SMA Male |
| GPS | via 1x SMA Female |
| Serial | via 1x USB |



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| | Multi-Bearer Mobile Communica- tions | Single, intuitive, user interface controller (UIC) providing multiple LMR bearers plus Cellular and Satellite | | |
|---|--|---|--|--|
| | In-Vehicle Repeater (IVR) | In-Band, Out-of-Band / Cross-Band LMR Repeater | | |
| ĺ | Wireless LMR Network Extender | With multiple LMR radios attached, the IVX can extend the reach of LMR networks | | |
| | Wired LMR Network Extender | Via wired DFSI connection IVX can extend an existing P25 network | | |
| | Wireless Access Point | Local WiFi backhauled over any permitted IP network | | |
| | P25 Radio Mode over IP | End-to-end encrypted P25 over Cellular, Satellite, WiFi or Ethernet without needing an attached P25 radio | | |
| | Location Services / Emergency Manage- ment | Track IVX across any / all bearers to ensure worker safety and support emergency functionality | | |



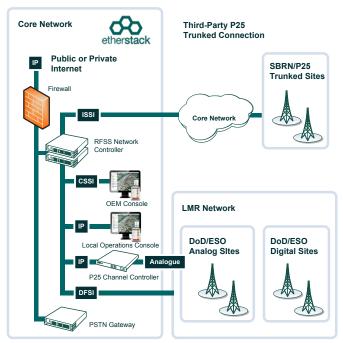












Flexible - As user needs and system complexity grows over time, the IVX platform can be re-configured to support many more operational scenarios.

This ensures that the initial investment is not wasted as your system expands or is built out.

Single User Interface -

The IVX is coupled with a rugged, high-contrast OLED User Interface Controller.
This reduces clutter in the

communications operating environment, yet still enables the user to access all attached communication equipment quickly and

| Etherstack IVX Specifications | | | | | |
|---------------------------------------|--|--|---|--|--|
| Physical IVX, included mounting plate | | Physical - Single User Interface Con- troller | D: 6.41" / 162.8mm H: 1.14" / 28.9mm W: 5" / 127mm Weight: 1.37 pounds / 620g Keypad: 0-9,*#,+-, PTT, Duress, plus programmable buttons Display: Hi Vis. OLED,128x64 + backlit keypad | | |
| Electrical | 10.8v - 32v DC negative earth Power Consumption 4W (typ.), 6W (max. with 3G/4G active, max. volume, GPS scanning) | Security | DES AES-256 ECB, OFB, CBC | | |
| Interfaces | Front: 3x RJ45 (2x Ethernet, 1x UIC) Back: 3x Digital LMR / RS232 1x D-sub 4-Wire E&M / Balanced Audio 3x D-sub SMA Female (2x Cellular, 1x GPS) 1x SMA Male (WiFi / Bluetooth) 1x USB-C 2.0 1x DC Power 2.5mm x 5.5mm Female Barrel | Cellular Bands | Present 3G - B1,5,8 Future 3G - B1,2,4,5,6,8,9,19 Present 4G - B2,4,5,12,13,14,17,66 Future 4G - B1,2,3,4,5,7,8,9,12,13,14,18,19,20,26,29,30,32,41,43,46,48,66 | | |
| RF | WiFi (802.11b/g/n) - 2.4GHz Bluetooth (v4.2) - 2.4GHz GPS - 1.2GHz, 1.5GHz | Supported Call Types | Individual, Group, Broadcast, Emergency Encryption, Man-down / Duress, Location Services, PSTN | | |

All specifications are subject to change without notice.

Warranty and Support



Etherstack offers a comprehensive warranty and support package to back up our product range. This package keeps you up to date with the latest innovations in the TIA-102 P25 suite of standards







