

BST30/35 PNG Mobile Base Station



The PNG BST30 and BST35 are mobile versions of the PNG base station which will be operated as a stand-alone base or connected to a wired ICS. The base stations support two audio connections.

The BST30 comes without an internal battery. Both units can be powered by the vehicle's DC bus, accepting 11 to 33VDC, while the BST35 is powered by a 70Wh internal Lithium Ion battery which provides up to 10h of continuous operation. The battery is charged through a USB-C charger or the vehicle's DC bus.

The system is designed for ease of use with glove friendly buttons and a night vision friendly dimmable display.

The system provides support for a wired microphone headset connected directly to the base providing the operator with wired access to the intercom loop, or if connected to the platform ICS, extending the audio connection to avoid occupying platform audio resources. The system can be connected to installed radios via the platform's audio control interface or via dedicated

audio interfaces. It can supply a PTT signal, - thereby providing direct remote access to platform installed radios, and it can provide GPS data from connected remote transceivers to map displays.

The PNG system supports two simultaneous intercom loops. Several remote users are supported, and two groups of wireless PNG users can be defined and linked to respective loops in the platform ICS. ICS loops may be selectively addressed by the crew during the mission. The system can mix intercom loops which enables crew members to listen to both loops while selectively choosing to talk on a single loop.

The system's compact and versatile design make it easy to transport. It is built to IP67 standards in a rugged powder coated aluminium chassis. Its rugged design enables it to withstand dust, moisture and harsh environmental conditions.

Mounting brackets and pouches are available for securely strapping the system onto the platform or as a manpack option.

Technical spec BST30/35:

Radio:	Duplex, single frequency
Frequency:	397-470 MHz customer specified channels
VOX operation:	Axnes patented NIVOX
Number of wireless users:	Unlimited
Number of groups:	Up to two
Number of radio configurations:	Up to 20
Encryption:	AES 256
Operating temperature:	-20°C to +55°C
Storage temperature:	-40°C to +60°C
Long term storage temperature:	+10°C to +35°C
Moving map interface:	RS232
Power supply	
Charger input:	USB-C 45W, wall adapter
External power:	11-33VDC, 7A internal fuse
Internal battery capacity:	70Wh supports 10h usage
Current consumption (typical):	Operation 200mA 28V when battery charging is disabled
Protection:	Reverse voltage protection
Audio interface	
Number of audio interfaces:	Two intercom connections + one headset interface
Line output level:	0.8-850mV rms, 150 Ω load impedance, 1KHz test signal 0.46-37.5mV rms, 5 Ω load impedance, 1KHz test signal
Line input impedance:	600 Ω at 1 kHz
Line input level:	70-5000 mV rms
PTT out:	Supported on audio interface 0. Open collector output, active low
Broadcast and mute activation:	Active ground, internal pullup.
Headset compatibility:	Dynamic and amplified mic
Connector:	Amphenol 26 pin Circular Mil 58-570125-26P
Antenna:	BNC
Programming and configuration:	CAN Bus/USB-C
Radio characteristics	
Frequency:	Civilian UHF: 397-470 MHz (customer configurations)
Channel separation:	25 KHz
Modulation:	8PSK, 16QAM
Frequency stability:	<5 ppm
Receiver sensitivity:	<97dBm at BER 10 ⁻²
Output power:	400mW nominal. Configurable down to 50mW
Antenna impedance:	50 Ω
Dimensions	
Physical dimensions:	141x53x134 mm (incl connectors)
Weight BST35:	1160 g
Weight BST30:	890 g
Material:	Powder coated aluminium
Waterproofness:	IPX7