# Product Sheet **Transmitter with Ethernet** 20-62 Series

The 20-62 transmitters are available in VHF or UHF, with user-programmable power output ranging from 50 milliwatts to 5 watts. Using programming software, each model can be tuned across its full frequency range with no hardware adjustments.



Product code VHF: 20-62-0150 Product code UHF: 20-62-0450

#### **Key Features**

- » Available in VHF or UHF bands
- » Supports NRZ and POCSAG transmissions
- » High VSWR tolerance
- » 100% duty cycle
- » Two RS232 serial ports
- » USB port
- » Four discrete switch inputs
- » In-built POCSAG encoder
- » Low voltage detection
- » RF output through standard SMA connector
- » CAP and pre-programmed message databases
- » CAP code import from CSV or Text file
- » 512, 1200 or 2400 Baud over-air
- » Message buffering
- » Periodic message option (watchdog)
- » Programmable switch de-bounce
- » Protocols: See over

## Operation

The 20-62 transmitter offers dual functionality as both an NRZ and POCSAG transmitter, featuring a built-in POCSAG encoder. With two RS232 serial ports and a mini-USB port, the device provides expanded application possibilities and supports input/output expansion through external interfaces. Connectivity is further enhanced with I.P support via the TCP/IP interface. The transmitter accommodates diverse paging transmissions through industry standard protocols such as Salcom proprietary protocol, Telocator Alphanumeric Protocol (TAP/PET/IXO), and Telocator Network Paging Protocol (TNPPv3.8). Notably, its independent port configuration allows seamless connection to multiple input devices.

### Programming

An internal database with up to 1,000 CAP codes which can be uploaded using the configuration tool which allows the import of CSV or Text files. Configuration of the transmitter is performed via any of the communication ports using a Salcom Configuration Tool (Sacoto), which allows for the setting of all operational parameters.



#### **Technical Specification**

#### VHF/UHF Transmitter - 20-62-0150, 20-62-0450

Options	20-62-0150: VHF Transmitter 20-62-0450: UHF Transmitter
Frequency Range	VHF: 140 - 174MHz UHF: 421.5 - 475MHz
Frequency Selection	User configurable
Power Supply	+13.8V typical (11 to 15 VDC range)
Power Consumption	Standby: 60mA (90mA when connected to Ethernet) Transmit: 1.0A @ 5W (typical)
Transmit Power	5W, 2W, 1W, 500mW, 250mW, 100mW, 50mW (Custom values on request)
Channel Spacing	5kHz, 6.25kHz, 10kHz, 12.5kHz, 20KHz, 25kHz
Modulation	FSK with NRZ data
Deviation	±2.25kHz or ±4.5kHz
Transmit Duty Cycle	100% (with adequate ventilation)
Baud Rates	512 or 1200
Message Format	POCSAG; Alphanumeric or Numeric
RF Connector	50Ω SMA
Configuration Application	Salcom Configuration Tool (Sacoto)
Programming Cable	Standard USB mini-B, RS232 (with adapter), or Ethernet
Serial Ports	RS232 / USB - 9600, N, 8, 1
Ethernet	TCP Client, TCP Server, UDP Client, or UDP Server. Static or DHCP addressing.
Serial Protocols	Salcom; TAP (PET/IXO); TNPP v3.8; TPP (half), TPP (full); ESPA 4.4.4; Match; Gent; GPS &; Pulse Count; SMS; Comp1; Comp2; VisiCAD; Morley; FENZ; Flex; Multitone (half); Multitone (Full). Also protocols compatible with: Ascom, Austco, Scope, Blick and Gaming
Trigger Inputs	Four switch inputs on RJ45 connector; internal pull-up
Other I/O	External Modulation (0 - 5V), PTT IN, PTT OUT (50mA max)
Connectors	SMA: RF Output; RJ-12 (6P6C): Two RS-232 serial ports; USB-mini: USB-2 serial; RJ-45 (8P8C): Inputs and Outputs; Network RJ-45: Ethernet; Pluggable Terminal Block: DC Power in
Power Connector	2-way pluggable terminal block, 5.08mm (0.2") pitch (supplied)
Environmental Protection	Not suitable for unprotected outdoor use. Should be protected from adverse environmental conditions
Operating Temperature	-20°C to +50°C (-4°F to 122°F)
Indicators	Power LED (Green) <ul> <li>Slow Flashing = Normal Operation</li> </ul> <li>Status LED (Red) <ul> <li>Rapid flashing = Transmitting</li> <li>Slow flashing (3Hz for 7 secs) = Error Condition</li> </ul> </li>
Weight	320g
Enclosure Dimensions	130mm x 31mm x 125mm (W x H x D) (5.12 x 1.23 x 5.04 in)
Enclosure Material	Extruded aluminium
Colour	Bright Silver Anodised Aluminium
Approvals	EN 301 489-2 V2.1.1 (2019-4) EN 300 224 V2.1.1, 2017-06 FCC CFR47 Part 15, subpart A and B FCC CFR47 Part 90 & Part 2

NB: All specifications and applications are indicative only and subject to change without prior notification.

