Product Sheet

20-62 Series

UHF/ VHF Transmitter with Ethernet

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. All models can be configured to operate remotely via Ethernet or be controlled locally via RS232 serial or USB to provide numeric, alphanumeric and tone only POCSAG messaging.

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 is capable of operating as an NRZ or POCSAG transmitter; the built-in POCSAG encoder can be enabled or disabled as required.

In addition to two RS232 serial ports, a mini-USB port enhances the range of applications to which the transmitter can be applied. Input / Output expansion is also possible via an external interface. I.P connectivity is available via the TCP/IP interface.

All communication ports can be used to initiate paging transmissions using several industry standard protocols including Salcom proprietary protocol, Telocator Alphanumeric Protocol (TAP/PET/IXO) and Telocator Network Paging Protocol (TNPPv3.8). The ports can be configured independently making it possible to connect 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

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

Options	20-62-0150: VHF Transmitter 20-62-0450: UHF Transmitter
Frequency Range	VHF: 140 - 174MHz UHF: 427.5 - 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 adaptor), or Ethernet
Serial Ports	RS232 / USB - 9600, N, 8, 1
Ethernet	TCP Client, TCP Server, UPD 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)
	   • Slow Flashing = Normal Operation
	Status LED (Red)
	   • Rapid flashing = Transmitting
	   • Slow flashing (3Hz for 7 secs) = Error Condition

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	AS/NZS 4769.1:2000 + Amendment 1:2002 (RF) EN 300-224 V2.1.0. (RF), EN301 489-2 V2.1.0 (EMC) EN 60950-1:2006 (Safety) FCC CFR47 (Part 90 (RF). Part 2 (RF), Part 15 (EMC), Part 1 (Safety)

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

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