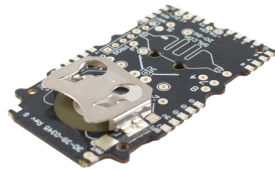
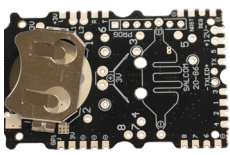


Product Sheet

Pendant Transmitter – PCB

20-86-5000 Series

Aimed at integrators and developers, the 20-86-5000 series is a small, high specification, POCSAG paging transmitter printed circuit board, 20-86-9000 inherits from this range and the 20-86 series Pendant Transmitter range.



Product code
20-86-5000

Application Example



This example demonstrates how you can use the PCB in your own enclosure, or similar requirement

The 20-86-5000 PCB has the same functionality of transmission indication (solid RED LED) and the advanced low battery indicator (flashing RED LED) transmission being sent

Key Features

- » The transmitter is a small, low cost, high specification bare printed circuit board paging transmitter measuring 55.5mm x 32.5mm x 6.5mm with battery fitted
- » The 20-86 is a low power transmitter, when used with an external antenna a direct line of sight range of up to eight hundred meters can be expected. When used within buildings the range will be reduced depending upon the building.
- » It has been tested and type approved as a bare printed circuit board allowing integration into other products without further type approval testing being required.
- » Unique Advanced Low Battery Indication (ALBI) Feature

Operation

The 20-86 range of products can send text messages directly to paging receivers, providing simpler, lower cost systems since intermediate receivers and transmitters are not required for short range applications. Using an appropriate receiver the transmitter can also be used for a general remote control applications such as turning on lights, disabling alarms etc.

Powered by a standard CR2032 coin cell, the transmitter will operate for more than five thousand transmissions under normal conditions before the battery needs to be replaced.

Programming

20-86 transmitters support up to eight inputs, each of which can be programmed with up to a thirty five character message. Programming software is available for download from the Salcom website (www.salcom.com). or can be provided pre-programmed.

Technical Specification

PCB Transmitter Board Series - UHF- 20-86-5000

Frequency Range	440 – 470MHz UHF
Frequency Selection	Via software
Battery	3V, CR2032 button cell
Battery Life	Approx. 5,000 transmissions Approx. 5 years standby
External Power Supply	3.7 to 18 Volts (via onboard regulator) 3 Volts (unregulated; external battery)
Power Consumption	Standby: <0.5µA Transmit: 26mA (no TX LED)
Transmit Power	10mW
Channel Spacing	25kHz, 12.5kHz, or 6.25kHz
Modulation	FSK with NRZ data
Deviation	±4.5kHz, ±2.3kHz, or ±1.0kHz
External Connections	Thru-hole pads or edge-of-board castellations
Inputs	Eight; user programmable
Received Indication Outputs	Two LED outputs; via 680Ω resistor
Transmit Indication Output	TX LED; via 680Ω resistor
Transmit Duty Cycle	Up to 20%; Maximum 30 seconds on time
Baud Rates	512, 1200, or 2400
Message Format	POCSAG; Alphanumeric or Numeric
Configuration Application	Sacoto (Salcom Configuration Tool software)
Programming Cable	20-51-0001 (USB)
Serial Port	9600, N, 8, 1; 3V TTL
Antenna	External; connection via thru-hole pad or castellation
Environmental Protection	None, PCB must be housed in suitable enclosure
Operating Temperature	-10°C to + 55° C (+14°F to +131°F)
Weight	6g with battery
Board Dimensions	55.5mm x 32.5mm x 6.5mm (L x W x H)
Approvals	EN 301 489-2 V2.1.1 (2019-4) EN 300 224 V2.1.1, 2017-06

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