

ST-5000S

S-BAND MULTI-MODE TELEMETRY TRANSMITTER



The ST-5000S Telemetry Transmitter is designed for S-Band operation in aerospace environments where size, weight and power efficiencies are critical.



L-3 Telemetry & RF Products (L-3 T&RF) evolutionary transmitter extends battery life while incorporating ultra-high power efficiency, serial-loaded programmability and ARTM Tier 0, 1 and 2 modulation schemes. This all comes with the performance, quality, heritage and reliability you've come to expect from L-3 T&RF telemetry transmitter products. The ST-5000S continues the legacy of the successful ST-800, 2000, 3000 and 4000 (SOQPSK) series of L-3 telemetry transmitters while utilizing advanced waveform technology.



The ST-5000S is available in 2-, 5- and 10-Watt models and can also offer a model where power flexibility/programmability can be provided. Center frequency, deviation sensitivity and other features can be programmed through a serial communications port using a basic PC.

The ST-5000's internal modules (modulator, regulator, and power amplifier) are housed in separate machined enclosures to maximize RF isolation, while providing a rigid and robust mechanical design able to withstand the harshest of missile, weapons and aircraft mission environments. All units are subjected to rigorous environmental testing requirements in the factory to ensure reliable operation under extreme mission conditions every time. Product and performance customizing is available to support customer specific requirements.

FEATURES

- Integral and proprietary isolated switching power supply design resulting in ultra-high efficiency, Programmable: 2 W, 5 W and 10 W
- Lower heat dissipation, Significantly reduces heat sink requirements
- Full S-Band coverage, 2200 to 2400 MHz
- Tier 0, 1 and 2 (selectable)
- Programmable center frequency via serial communications port RS-232 (Non-volatile memory retains settings when power is off)
- RS-422 data and clock interface, (LVDS & TTL optional)
- Meets latest IRIG-106 requirements
- Remote power on/off control
- Built-in status capability, including: Temperature, Forward power monitor, Internal power supply voltages
- Forward Error Correction (FEC), turbo product codes (optional)

RF

POWER

MECHANICAL

ENVIRONMENTAL

DIGITAL INTERFACE

TOP VIEW

Dimensions (inches [millimeters]):

- Overall width: 3.00 [76.20]
- Overall height: 2.70 [68.58]
- Top edge: $4X .09$ R.
- Right edge: $.37 \pm .03$ [9.4MM]
- Bottom edge: $.29 \pm .03$ [7.36]
- Left edge: $.156 + .005 / - .001$ [3.96]
- Top-left corner: $4X$ [3.96]
- Top-left hole: $\Phi .020$ [A B C]
- Top-left hole: 2.00 [50.80]
- Top-left hole: 1.700 [43.18]
- Top-left hole: $.15$ [3.81]
- Top-left hole: $4X .28$ [7.11]
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- Top-left hole: 2.700 [68.58]
- Top-left hole: 3.00 [76.20]
- Top-left hole: $.15$ [3.81]
- Top-left hole: $.27$ [6.86MM]
- Top-left hole: $.80$ [20.32MM]
- Top-left hole: $.17$ [4.32MM]
- Top-left hole: $.26$ [6.60MM]
- Top-left hole: $.59$ [14.99MM]
- Top-left hole: $.64$ [16.26MM]
- Top-left hole: 1.50 [38.10MM]
- Top-left hole: $.15$ [3.81]
- Top-left hole: $.27$ [6.86MM]
- Top-left hole: $.80$ [20.32MM]
- Top-left hole: $.17$ [4.32MM]
- Top-left hole: $.26$ [6.60MM]
- Top-left hole: $.59$ [14.99MM]
- Top-left hole: $.64$ [16.26MM]
- Top-left hole: 1.50 [38.10MM]

SIDE VIEW

Dimensions (inches [millimeters]):

- Overall width: 3.00 [76.20]
- Overall height: 2.70 [68.58]
- Top edge: $4X .09$ R.
- Right edge: $.37 \pm .03$ [9.4MM]
- Bottom edge: $.29 \pm .03$ [7.36]
- Left edge: $.156 + .005 / - .001$ [3.96]
- Top-left corner: $4X$ [3.96]
- Top-left hole: $\Phi .020$ [A B C]
- Top-left hole: 2.00 [50.80]
- Top-left hole: 1.700 [43.18]
- Top-left hole: $.15$ [3.81]
- Top-left hole: $4X .28$ [7.11]
- Top-left hole: $4X .28$ [7.11]
- Top-left hole: 2.700 [68.58]
- Top-left hole: 3.00 [76.20]
- Top-left hole: $.15$ [3.81]
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- Top-left hole: $.80$ [20.32MM]
- Top-left hole: $.17$ [4.32MM]
- Top-left hole: $.26$ [6.60MM]
- Top-left hole: $.59$ [14.99MM]
- Top-left hole: $.64$ [16.26MM]
- Top-left hole: 1.50 [38.10MM]

FRONT VIEW

Dimensions (inches [millimeters]):

- Overall width: 3.00 [76.20]
- Overall height: 2.70 [68.58]
- Top edge: $4X .09$ R.
- Right edge: $.37 \pm .03$ [9.4MM]
- Bottom edge: $.29 \pm .03$ [7.36]
- Left edge: $.156 + .005 / - .001$ [3.96]
- Top-left corner: $4X$ [3.96]
- Top-left hole: $\Phi .020$ [A B C]
- Top-left hole: 2.00 [50.80]
- Top-left hole: 1.700 [43.18]
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- Top-left hole: $.59$ [14.99MM]
- Top-left hole: $.64$ [16.26MM]
- Top-left hole: 1.50 [38.10MM]

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