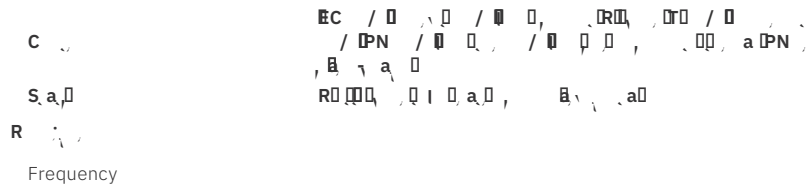
C/TT-520 S-BAND MULTIMODE



Frequency

Compatible systems include the TDRSS, Space Network, the NASA Ground Network, the NASA Deep Space Network and the Universal Space Network. The C/TT-520 also supports the Common Communications for Visiting Vehicles protocol used on the International Space Station and is a flexible hardware and firmware solution adaptable to a variety of missions and applications.

TRANSPONDER	
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I/O Type	3.3 V RS-422
Rx Outputs	Redundant command data/clock serial status, lock indicators
Rx Inputs	Control, reset, AUX data
Tx Inputs	Redundant TxData I/Q, clock
P	
Input Voltage	22 to 36 VDC
Input Power Rx Only	<8 W max
Input Power RX & Tx	5 W output: <39 W 20 W output: <80 W
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Temperature	-40 °C to +70 °C (non-operating) -10 °C to +60 °C (operating)
Random Vibration	18.4 grms, 3-axis
Pyrotechnic Shock	1400 (1 kHz to 10 kHz)
Altitude	Unlimited
Total Dose	20 kRad(Si) min
Latch-Up LET	> 75MeV/mg/cm^2

VERSATILITY

The C/TT-520 is configurable to suit both your mission and your spacecraft bus. Selectable parameters include RF frequency, 1 of 85 gold codes, receive and transmit data rates, receive and transmit modulations, RF output power, encryption/decryption, convolutional encoding, Viterbi decoding and Reed Solomon encoding/decoding. Available interfacing includes RS-422, low-voltage differential signaling, universal asynchronous receiver-transmitter and SPI.

EXPERT SUPPORT

The C/TT-520 is designed, built, assembled and tested all within one facility and is serviced and supported by engineering professionals with decades of spaceflight design experience. Every C/TT-520 delivered is accompanied by domain expertise in parts, materials, radiation analysis, mechanical engineering, power supply design, digital signal processing, radio frequency design and manufacturing engineering. For most applications, existing data items can be provided for review, reducing the analysis and testing required.

C/TT-520 S-Band Multimode Transponder

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