

Transmitter Module

Reference: **TX-X-X-X-NX** ("X" value must be selected).



On Board transmitter module for NanoX system.

This module can be combined to **CPU-NRT-NX** or **CPU-NT-NX** controller modules to integrate transmitter functionality directly into the same chassis.

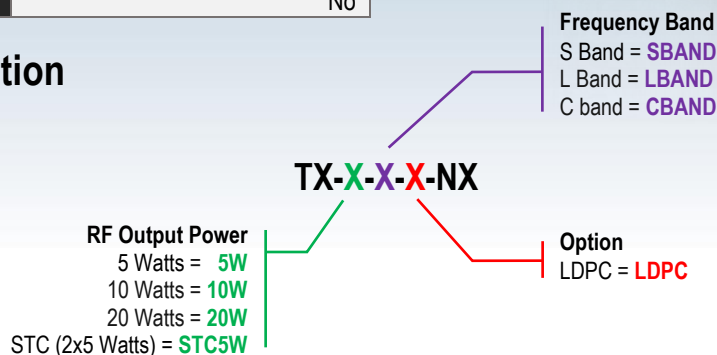


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Depend of part number

Quick notes

Number of inputs	1
Max modules by unit	1
Module Mass	From 450 grams to 950 grams
Environmental ratings	
Operating temperature	-40°C to 65°C
Storage temperature	-55C to 90°C
Socket Connectors type	MIL-DTL-83513
Number	1
pins	9
Socket Connectors type	SMA
Number	1 or 2 depending on version
Xchange technology®	No

Part Number Selection



Specifications

RF Specifications	
Carrier frequency range:	2150 to 2400 MHz S band or 1400 to 1600 MHz L band or C band 4400 to 4900 MHz or 5091 to 5150 MHz (band must be specified when order).
RF output power:	From 5 W to 20 W (43 dBm ± 1 dB) all conditions (must be specified when order). 2 x 5 W for STC option
VSWR	1.5:
Load mismatch	no degradation (RF = open or short)
Spurious outputs	In accordance IRIG106-96 (-60 dBc typical)
Harmonics	In accordance IRIG106-96.
Carrier frequency tuning step	125 kHz (for rate below 1Mbits/s) 250 kHz (for rate 1Mbits/s to 20Mbits/s),
Carrier frequency stability	± 2.5 ppm over temperature range. ± 7.5 ppm all clauses including aging over 5 years.
Modulation	user selectable digital PCM/FM (Tier 0), SOQPSK-TG (Tier I)
Spectral occupancy	IRIG 106-17 Chapter 2 spectral mask for tier 0 and tier 1.
Data rate	1000 kbps to 20Mbps (100kbps option available) automatic adaptation of deviation according to Tier 0 and Tier I IRIG mask.
STC option	with two antennas with SMA connectors according to IRIG 106-15 Appendix S
LDPC option	1024, 4096 blocks code rate 1/2, 2/3 and 4/5 according to IRIG 106-15 Appendix R.
Monitoring and Settings	
Through GUI or IRIG 106-17 Chapter 2 Appendix 2C	Temperature Alarms, Frequency, Modulation etc ...
Power Requirement	
Power input	28 V DC typical 24 V min to 32 V max (18 V min to 36 V max option available)
Current:	3A under 28 V @ 20 W RF.
Reverse polarity protection	✓ Included
Thermal protection	✓ Included

Connector pinout

TX ANTENNA OUTPUT

SOCKET

TYPE: **SMA**

MANUFACTURE: **RADIALL**

SERIAL: **R.125.680.000**

SOCKET MARKING: « **TX ANTENNA** »

NUMBER OF THIS SOCKET ON MODULE: 1 (2 if STC option).

TX POWER INPUT

SOCKET

TYPE: SOCKET 9 CONTACTS **FEMALE**

MANUFACTURE: **GLENAIR**

TYPE: **MIL-DTL-83513**

REFERENCE: **MR75-90-9-S-1-B-S-U**

SOCKET 1 MARKING: « **TX POWER SUPPLY** »

NUMBER OF THIS SOCKET ON MODULE: 1

PLUG

TYPE: PLUG 9 CONTACTS **MALE**

MANUFACTURE: **GLENAIR**

TYPE: **MIL-DTL-83513**

REFERENCE: **MWDM-2-L-9-P-6-E-5-18-M**

CABLE MARKING: « **TX POWER SUPPLY** »

NUMBER OF THIS PLUG ON MODULE: 1

NOTE:

« GND »: ELECTRONIC GROUND

« MM »: MECHANICAL GROUNDING

N° Pin	Name	Color	label
1	MECHANICAL MASS		MM
2	28 V aircraft	Red	+28VA
3	28 V aircraft		
4	28 V aircraft		
5	28 V aircraft		
6	0 V aircraft	Black	0VA
7	0 V aircraft		
8	0 V aircraft		
9	0 V aircraft		