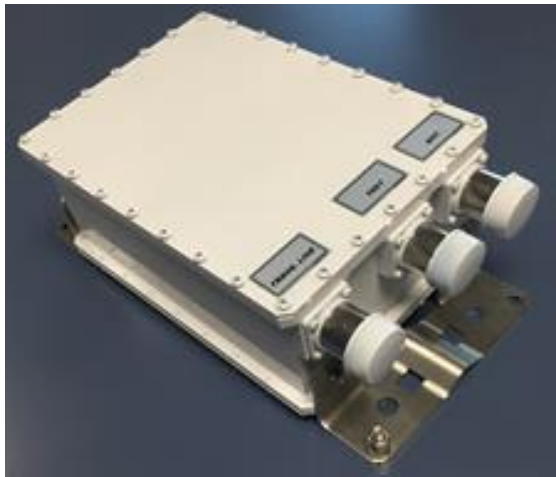


DS7TM Compact Tower Top Amplifier

(700/800 MHz) Low Noise Figure

Use with DSX7PDU Receiver Multicoupler/Power Distribution Unit ordered separately

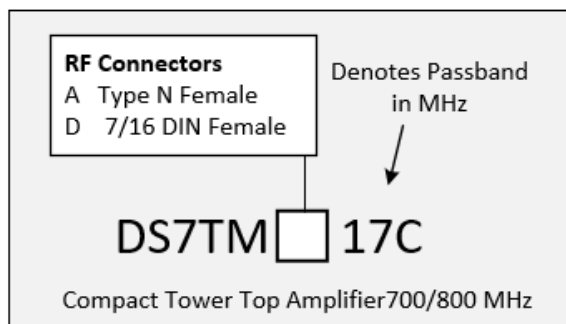


Model with 7/16 DIN Connectors Shown

Features and Benefits

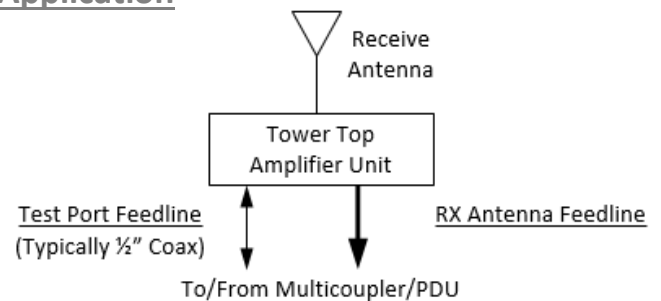
- ❖ Built-in window filter provides > 65 dB of system isolation at transmit frequencies. This TTA and the DSX7PDU Multicoupler/PDU together provide >110 dB of TX/RX isolation at 700/800 MHz bands.
- ❖ TTA includes dual redundant quadrature-coupled LNAs that provide low noise figure of 2.0 dB or less.
- ❖ Test port connection from Multicoupler/PDU enables accurate receiver sensitivity testing and ability to switch between the antenna and load.
- ❖ Redundant LNA and automatic amplifier bypass during alarm event or loss of power
- ❖ Compact and stable weatherproof housing, lightning protection on all ports

Ordering Information



Electrical Specifications	
Frequency Range	799 – 816 MHz
Passband	17 MHz
TTA Filter Isolation	>60 dB at 763-776 MHz and 851-869 MHz
Gain	>22 dB (-30 to + 60°C)
Noise Figure	<2.0 dB (-30 to + 60°C)
Input IP3	+15 dBm
Test Port Coupling	30 dB ± 1 dB
Return loss, all ports	>14 dB
Input DC Power	Transmission Line: 18/24 VDC Test Port: 6 VDC
Operating Current	Transmission Line: < 150 mA Test Port: <100 mA during Test only
Surge Protection	20 KA ANSI C62.1, 8/20 waveform, 110 joules
Low Noise Amplifier	
❖ Amplifier type	Quadrature Coupled
❖ Amplifier Redundancy	Two Independent amplifiers with automatic switching between A & B
❖ Bypass	Automatic bypass of amplifiers in case of alarm or loss of power
Mechanical Specifications	
Connectors (all ports)	See Ordering Information
Housing	Aluminum milled filter construction, Chem Film and paint finish
Mounting Brackets	1/8" Stainless Steel, two 7/16" STST band clamps provided
Dimensions	10.75 in. x 6.5 in. x 4.0 in. (without mounting brackets)
Weight / Shipping Weight	10 Lbs. / 13 Lbs.

Application



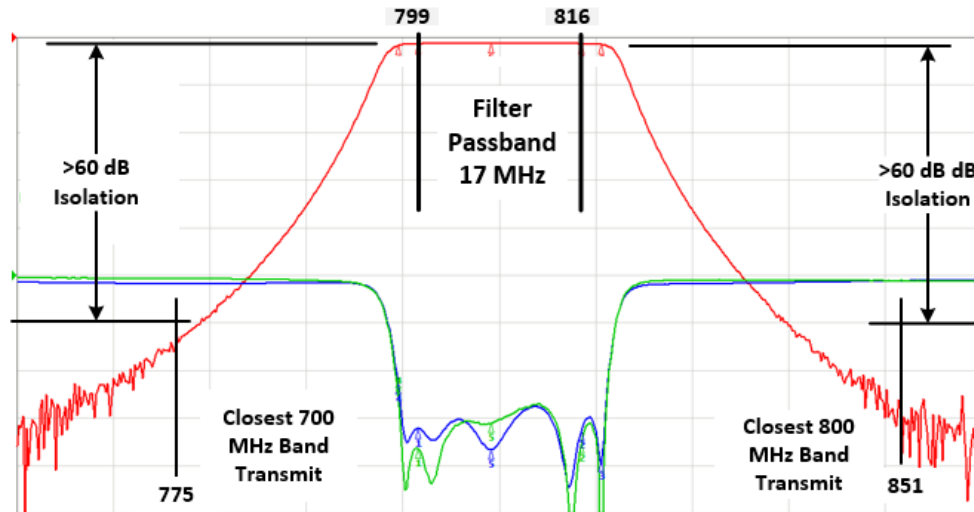
Specifications

DS7TM Compact Tower Top Amplifier

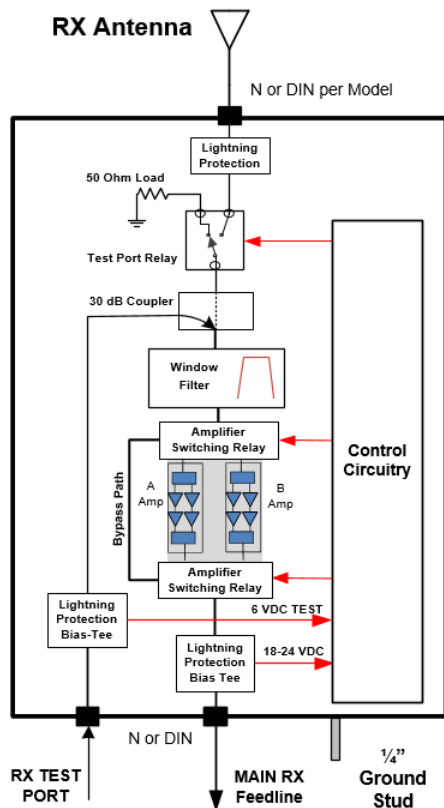
(700/800 MHz) Low Noise Figure

Use with DSX7PDU Receiver Multicoupler/Power Distribution Unit ordered separately

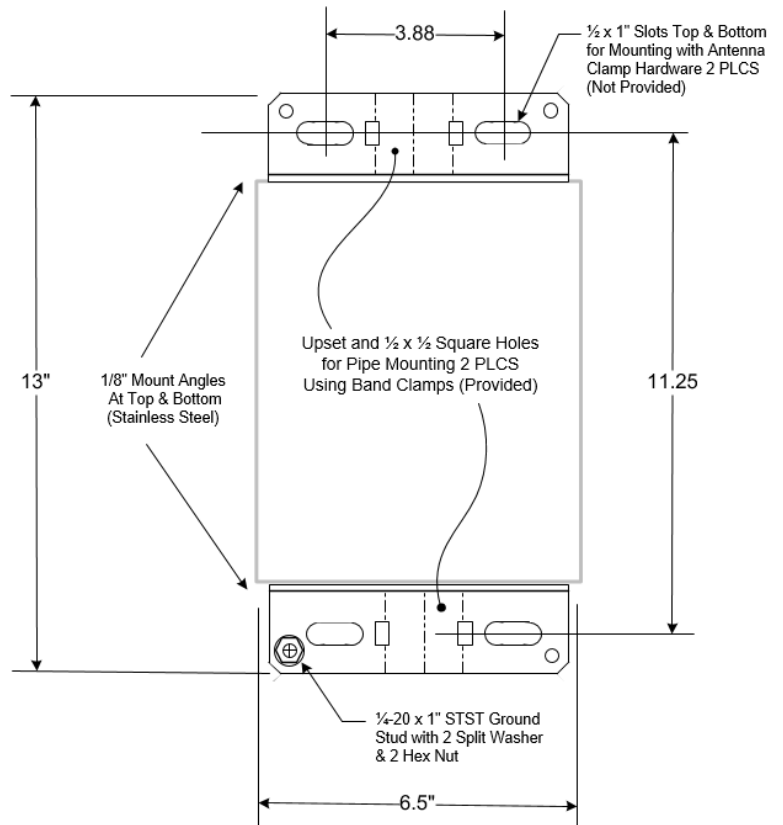
Window Filter Characteristics



Block Diagram



Mounting Pattern



Mount with Ground Stud and Connectors Down
(Connectors not shown)