

# DSX7PDU (700/800 MHz)

## SMART Receiver Multicoupler/Power Distribution Unit 8-32 channels

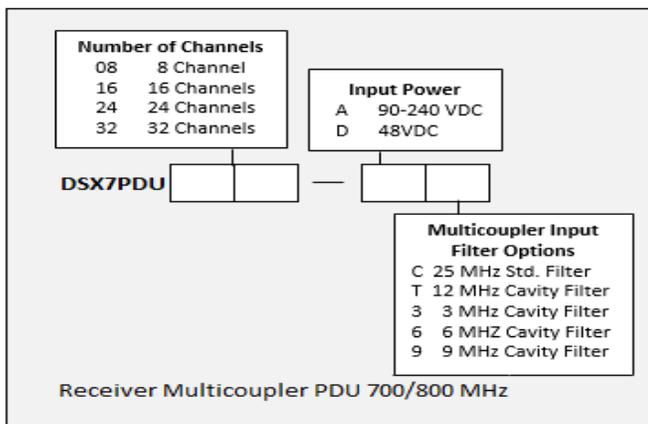
Use with DS7TM-Series Tower Top Amplifier ordered separately



### Features and Benefits

- ❖ 8-to-32 Channels in a 2 RU chassis (field expandable in 8 channel increments).
- ❖ Internal window filter provides 60 dB of extra system isolation at TX band; the Multicoupler/PDU and DS7TM-series TTA can provide >120 dB of TX/RX isolation at 700/800 MHz bands, easing need for antenna separation.
- ❖ Includes provision for connection of external post-filter for additional selectivity if needed.
- ❖ TTA Test Port connection at Multicoupler/PDU facilitates accurate receiver sensitivity testing.
- ❖ Self-terminating splitter outputs. No loads necessary.
- ❖ Built-in IP network Interface for remote monitoring and configuration; includes TLS Security Layer, SNMP V2c/V3 alarm traps for alarm management.

### Ordering Information



\* Gain variation of (+/-) 1/1.5 dB applicable to products shipped after May 1st, 2019

\*\*8-Channel Expansion Kits DSX7PDUEXP8 available for field installation

### Specifications

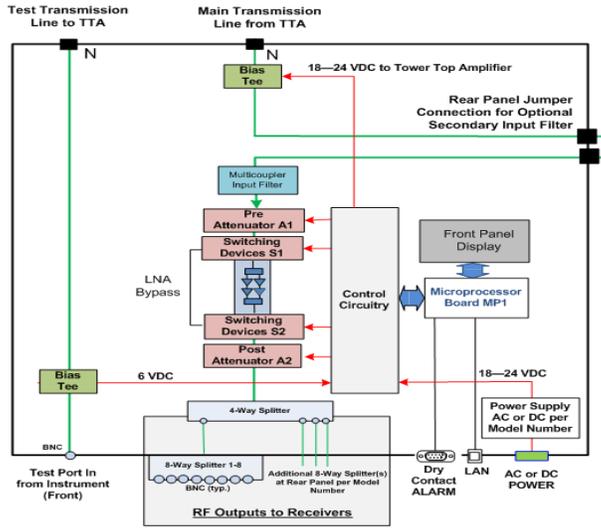
Electrical Specifications	
Frequency Range	799-824 MHz
Number of Channels	8-32 Channels **
Internal Post Filter Passband	See Ordering Information
Isolation at offset from edge of Multicoupler Input Filter Passband (See Plots Page 2)	Standard Filter: >60 dB at 25 MHz from 25 MHz Passband Cavity Filter: >15 dB at 3 MHz from 3 MHz Passband >20 dB at 6 MHz from 6 MHz Passband >25 dB at 9 MHz from 9 MHz Passband >25 dB at 12 MHz from 12 MHz Passband
Insertion Loss (Of Multicoupler Input Filters)	Standard Filter: <2.5 dB at 25 MHz Passband Cavity Filters: <2.0 dB at 3 MHz Passband <1.5 dB at 6 MHz Passband <1.2 dB at 9 MHz Passband <1.0 dB at 12 MHz Passband
Gain (With 799-824 MHz Standard Filter)	Expansion Ports: 20 dB Minimum Splitter Outputs: 799-818 MHz: 8 dB (+/-1 dB) * 818-824 MHz: 8 dB (+/-1.5 dB) * (0 dB pre & post attenuator settings)
Noise Figure	6.8 dB Maximum (0 dB pre & post attenuator settings, NF includes Post filter loss)
Input/output Return Loss	14 dB in Passband
Input IP3	+15 dBm
Low Noise Amplifier	Quadrature Coupled
Test Port Instrument Connection	Front Panel BNC
Post-LNA Filter Connections	Available on Rear Panel
Pre & Post -LNA Adjustable Attenuators	Electronic, 0 – 15 dB, 0.5 dB steps
RX – RX Port Isolation	>20 dB
Power Input	90-240 VAC or -48 VDC (36-72 VDC isolated) models available
Output DC Voltages to TTA	Transmission Line Port: 18-24 VDC Test Port: 6 VDC
User Interface	Web Browser or Front panel Touchscreen display
IP Interface	IPv4, TLS Security Layer, SNMP Alarms V2C/V3
Mechanical Specifications	
RF Connectors	✓ RF Input: N Female ✓ RF Outputs: BNC Female (rear) ✓ Test Port --Instrument: BNC Female (front) ✓ Test Port Out to TTA: N Female (rear) ✓ RF External Filter Ports: N female
IP Interface Connector	RJ45
Dry Contact Alarm Connector	Block Type
Mounting	19" x 3.5" 2 RU Panel, depth 11.5" including connectors
Grounding Provision	¼-inch stud at rear
Temperature Range (no degradation)	0°C to +50° C
Weight / Shipping Weight	8 lbs. / 12 lbs.

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### Block Diagram



### Internal Post Filter

### Isolation at Selected Passband

