

6300

Modular Distribution System

KEY FEATURES

- Low Phase Noise
- High Channel Isolation
- Up to 12 O/P Modules
- 6 Outputs per Module
- Hot Swap
- AC/DC Input

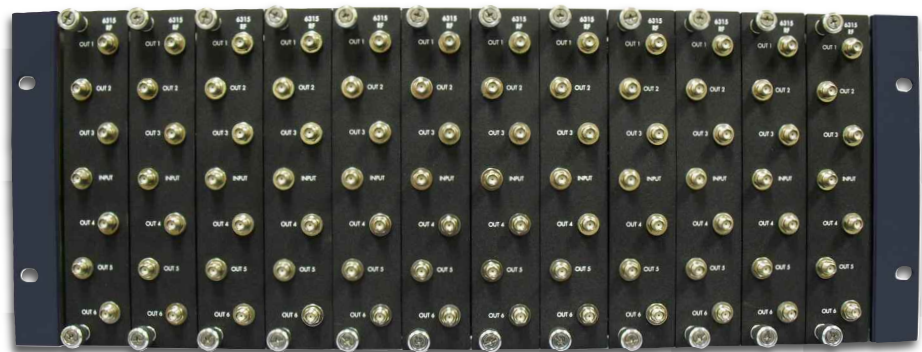
Symmetricom's 6300 is a hot swap, modular distribution chassis that supports high performance RF and 1PPS distribution. Designed for metrology applications, the 6300 supports the performance required to deliver high performance signaling without degradation.

The distribution modules take one input signal and provide 6 copies of the input signal. In a fully loaded 4U chassis, 72 output signals can be accommodated. Since each module has an input, multiple frequencies can be distributed within the same chassis.

The 6300 is available in a 4U and a 1U chassis configuration. Both versions use the same distribution modules. The 4U version can accommodate up to 12 distribution modules while the 1U version can accommodate two distribution modules.



1U Version



4U Version

FIG 1 Modular Distribution System

6300 SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

	Guaranteed	Typical
RF Distribution		
RF Input	>13 dBm	14 dBm
Bandwidth	1 – 20 MHz	
Gain (@5MHz)	+/-0.5 dB	
Impedance		
Input	50 Ohms	
Output	50 Ohms	
Return Loss		
Input @ 5 MHz	>25 dB	35 dB
Output @ 5 MHz	>20 dB	35 dB
Distortion		
Input +13 dBm	<-40 dBc	
Output +16 dBm		-30 dB
Isolation		
Output to Output	>120 dB	
Output to Input	>120 dB	
Temperature-Delay Coefficient		
0 C - 50 °C	<2 ps/°C	1 ps/°C
25 C – 35 °C	<2 ps/°C	1 ps/°C
Phase Noise		
Offset Frequency (Hz)	dBc/Hz	dBc/Hz
1 Hz		-144
10 Hz		-159
1 kHz		-171
10 kHz		-171
Pulse Distribution		
Rise/Fall Time	<5 ns	2 ns
Propagation Delay	<12 ns	2 ns
Differential Delay (channel to channel)	<0.5 ns	
Impedance		
Input	50 Ohms	
Output	50 Ohms	
Pulse levels (input and output 50 ohm load)	4.5 V logic 1	
Temperature-Delay Coefficient (0-50 °C)	<5 ps/°C	
Jitter (rms)	<1 ns	50 ps
Power Requirements		
Module Voltage:	+12 VDC/-12 VVDC	
Module Current:	<200 mA	
Chassis Voltage		
AC	100 - 240 VAC, 50/60 Hz	
DC	18 – 32 VDC	
Chassis Current:	<1.5 A	

ORDERING INFORMATION

	Part No.
4U Chassis, 1AC Power Supply	6300-4-01
4U Chassis, 1DC Power Supply	6300-4-02
4U Chassis, 1AC/1DC Power Supply	6300-4-03
4U Chassis, Dual AC Power Supply	6300-4-04
4U Chassis Dual DC Power Supply	6300-4-05
1U Chassis, 1AC Power Supply	6300-1-01
1U Chassis, 1DC Power Supply	6300-1-02
1U Chassis, 1AC/1DC Power Supply	6300-1-03
1U Chassis, Dual AC Power Supply	6300-1-04
1U Chassis, Dual DC Power Supply	6300-1-05
RF Distribution Module	6315
1PPS Distribution Module	6310



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