

ATC Broadcast Series

RF Signal Management

Splitter/Combiner Modules:

The Broadcast Series, combined with the innovative cable management of the chassis, provides engineers with a variety of products to simplify the RF signal management challenge.



Features:

- ◆ High density with standard F & BNC connectors.
- ◆ Patented make-before-break attenuator pad design for hitless signal balancing.
- ◆ Chassis supports both passive & active modules.
- ◆ Clear chassis door provides protection & clear view of modules.
- ◆ Clear attenuator pad covers & patented pad guides for simplified maintenance.
- ◆ High quality, precision F or BNC connectors.

- ◆ Designed to exceed NEBS requirements of grounding/bonding.
- ◆ Independent EMI near & far-field testing.
- ◆ One year warranty on all passive modules.
- ◆ Available in 1RU, 2RU, & 5RU chassis.
- ◆ NEBS Level 3 compliant.

RF Module Specifications

RF MODULE SPECIFICATIONS*	
ENVIRONMENTAL	
OPERATING TEMPERATURE	0° C to +50° C (+32° F to +122° F)
STORAGE TEMPERATURE	-40° C to +70° C (-40° F to +158° F)
STORAGE HUMIDITY	5-95% Non-condensing
ELECTRICAL	
EMI (EXTERNAL)	<-100dBc
INTERNAL ISOLATION OF DUAL/TRIPLE MODULES	<-70dBc
TEST POINT	Splitter: Measured between COMMON INPUT and TP Combiner: Measured relative to COMMON OUTPUT +/-1dB Accuracy from Nominal
RETURN LOSS, INPUT/OUTPUT	>20dB
RETURN LOSS, TP	>16dB
ISOLATION, PORT-TO-PORT	>30dB
FLATNESS	Defined as MAX +/-Deviation from Linear Trend Line
IMPEDANCE	75 Ω Nominal
OTHER	
DIMENSIONS	8.25"H x 0.83"W x 4.1"D (20.96H x 2.1W x 10.4D cm)
WEIGHT	1.43lbs (0.65kg)
NOTE:	
*Unless otherwise stated by module specific table , and applies from Fmin to Fmax.	

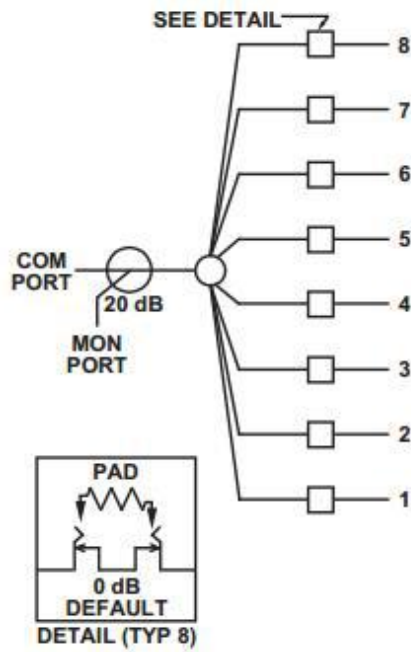
Splitter/Combiner Modules:

Make-Before-Break (MBB) Splitter/Combiner Module Specifications

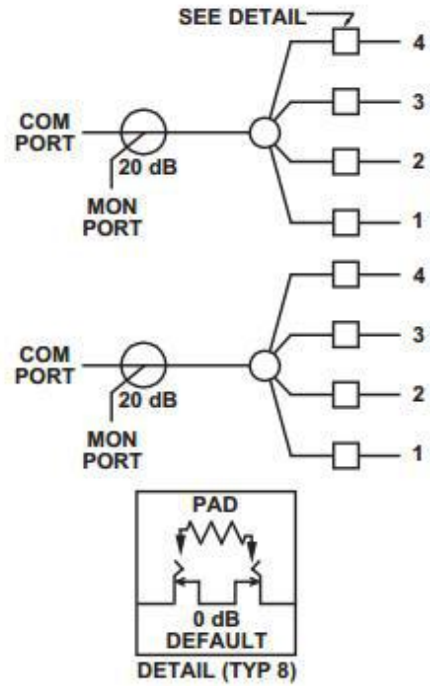
SPECIFICATIONS		8-WAY WITH		DUAL 4-WAY WITH		TRIPLE 2-WAY	
		HN-**-18		HN-**-24		HN-**-32	
FREQUENCY RANGE	Fmin-Fmax	5MHz	1002MHz	5MHz	1002MHz	5MHz	1002MHz
MEASUREMENT	FREQUENCY	Min (dB)	Max (dB)	Min (dB)	Max (dB)	Min (dB)	Max (dB)
INSERTION LOSS	5MHz	11.9	12.9	8.1	9.1	4.1	5.1
	50MHz	11.9	12.9	8.1	9.1	4.1	5.1
	550MHz	11.9	12.9	8.1	9.1	4.1	5.1
	870MHz	11.9	13.1	8.1	9.3	4.1	5.3
	1002MHz	11.9	13.1	8.1	9.3	4.1	5.3
FLATNESS	50-FmaxMHz		<1.0		<1.0		<1.0
TEST POINT	5-FmaxMHz	19.2	20.8	19.2	20.8	19.2	20.8
RETURN LOSS	5-50MHz	16		16		16	
	50-1002MHz	20		20		20	
NOTE:							
**-1 st *=S(splitter), C (combiner) or X (one splitter, one combiner); 2 nd *=F or B(BNC) connector							

Functional Schematics

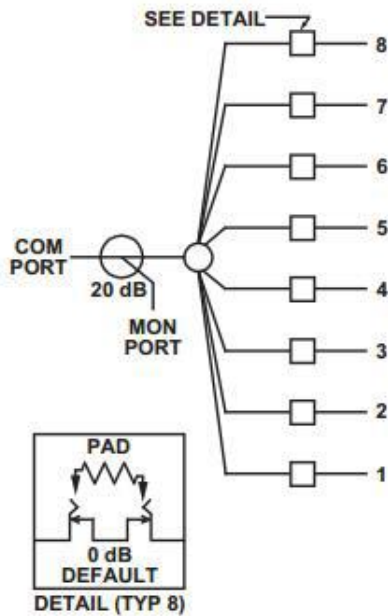
8-way Combiner



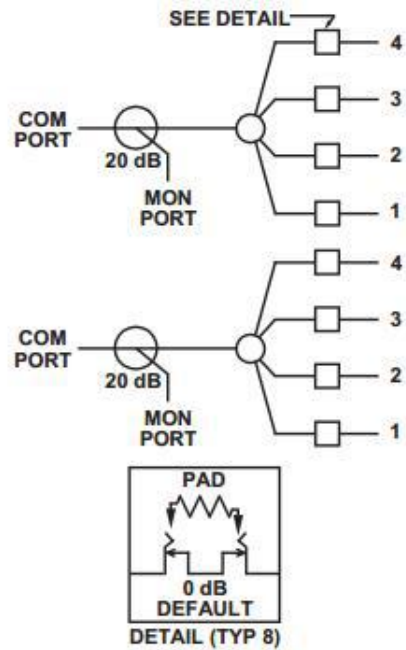
Dual 4-way Combiner

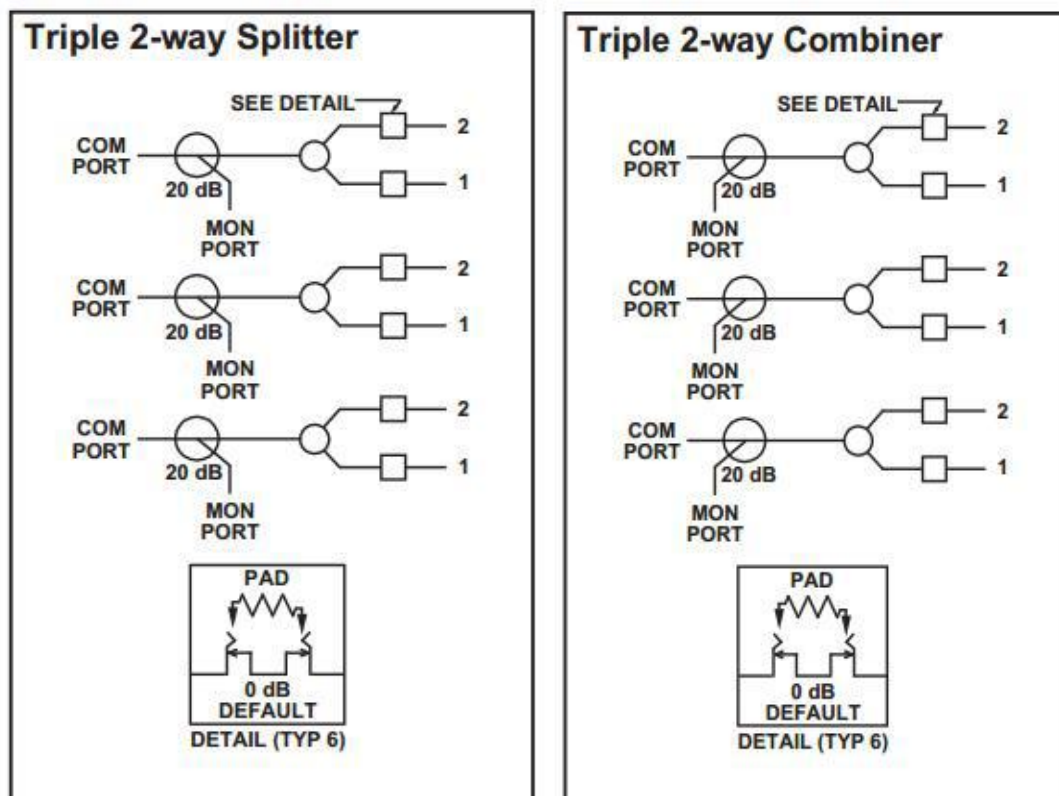


8-way Splitter



Dual 4-way Splitter





Splitter/Combiner Modules:

Example Part Number :HN-SF 2 4	
	1 2 3
1:Module Type: C=Combiner with Pad/Monitor S=Splitter with Pad/Monitor	
2:Connector Type: F=F B=BNC	
3:Configuration:18=8:1 24=2x4:1* 32=3x2:1*	
4: Frequency:Blank=1 GHz	
Part Number	Description
Splitter/Combiner with Pad & Monitor Modules	
HN-CF24	Combiner with Monitor,1GHz, F Connector, 2x4:1,0 dB Default
HN-SF24	Splitter with Monitor,1GHz, F Connector, 2x4:1,0 dB Default
HN-CF32	Combiner with Monitor,1GHz, F Connector, 3x2:1,0 dB Default
HN-SF32	Splitter with Monitor,1GHz, F Connector, 3x2:1,0 dB Default

HN-CF18	Combiner with Monitor, 1GHz, F Connector, 8:1, 0 dB Default
HN-SF18	Splitter with Monitor, 1GHz, F Connector, 8:1, 0 dB Default
NOTE: *3x2:1 and 2x4:1 housed in single module.	

Ordering Information

Splitter/Combiner Modules:

Plain Splitter/Combiner Module Specifications

SPECIFICATIONS		PLAIN 8-WAY		PLAIN DUAL 4-WAY		PLAIN TRIPLE 2-WAY	
		HN-PF18		HN-PF24		HN-PF32	
FREQUENCY RANGE	Fmin-Fmax	5MHz	1002MHz	5MHz	1002MHz	5MHz	1002MHz
MEASUREMENT	FREQUENCY	Min (dB)	Max (dB)	Min (dB)	Max (dB)	Min (dB)	Max (dB)
INSERTION LOSS	5MHz	11.1	12.1	7	7.8	3.5	4.3
	50MHz	11.1	12.1	7	7.8	3.5	4.3
	550MHz	11.1	12.1	7	7.8	3.5	4.3
	870MHz	11.1	12.1	7	7.8	3.5	4.3
	1002MHz	11.1	12.1	7	7.8	3.5	4.3
FLATNESS	50-FmaxMHz		<1.0		<1.0		<1.0
RETURN LOSS	5-50MHz	20		20		20	
	50-1002MHz	20		20		20	
NOTE: *PF32 and PF24 housed in single module.							

Ordering Information

Splitter/Combiner Modules:

Example Part Number :HN-PF 2 4 1 2 3	
1:Module Type: P=Plain Splitter/Combiner	
2:Connector Type: F=F	
3:Configuration:18=8:1 24=2x4:1* 32=3x2:1*	
4: Frequency:Blank=1 GHz	
Part Number	Description
Splitter/Combiner with Pad & Monitor Modules	

ATC Broadcast Series

HN-PF24	Plain, 1GHz, F Connector, 2x4:1
HN-PF32	Plain, 1GHz, F Connector, 3x2:1
HN-PF18	Plain, 1GHz, F Connector, 8:1
NOTE: *3x2:1 and 2x4:1 housed in single module.	