

DOCSIS 3.1 Compliant

Designed with expanded bandwidth for modern applications

Features & Benefits

- * CommDev XM-Series of Headend modular passives are engineered for best-in-class performance with high port-to-port Isolation and return loss, low insertion loss and frequency response across 5-1218 MHz .
- * Minimum of -30dB port-to-port isolation plus a minimum return loss specification of 20dB.
- * Low Insertion Loss characteristics in channel spacing from 24 MHz to 192 MHz.
- * Excellent flatness response within the frequency range of 5-1218MHz which is ideal for channel bonding transmission and receiving.
- * CommDev offers a competitive pricing structure which allows for customers to realize significant cost savings.

CommDev now offers a new "XM" Series of 1.2GHz Head End Passive Modules. Configured for the CommDev HPS Series and for installation compatibility with other manufacturer chassis'. These new modular passives provide RF signal management solutions for modern CATV Head-end or Hub site applications and meet with DOCSIS 3.1 standards.

Unlike other headend passives available in the market today, these broadband modules have been uniquely engineered for insertion of either a miniature Attenuator or Equalizer ("MP") at each of the units input and output ports. This built-in feature set is incorporated into splitters, combiners, and a variety of other configured passives to provide headend engineers with a set of new and unique tools needed for todays network maintenance and system growth requirements.

The new XM Series of passive modules offer an expanded Broadband frequency range from 5-1218MHz, and are made available in a variety of configurations. Modules are designed as combiners, splitters, and narrowcast modules featuring a -20 dB Test Port.

All configurations are optimized for superior performance characteristics within the operational frequency range. Standard modules are available including Triple 2-way, Dual 4-Way , and Single 8-way splitters or combiners. Narrowcast combiners and other customized configurations are also available.

- MP-ATT Attenuators are offered in 1dB increments from 0dB to 20dB as the plug-in sockets are positioned at each of the modules in/Out Ports.
- MP-EQ Equalizers are available in 1.5dB increments from 0dB to 18dB as the plug-in sockets are positioned at each of the modules in/Out Ports.

The internal equalization feature will insure a flat response (± 0.5 dB) within channel spacing from 24 MHz to 192 MHz or beyond. To maximize utilization of rack space the 2- and 4-way models are packaged by three and two correspondingly while occupying a single slot in the modular chassis. Modular passives are designed with internal walls which prevent any cross talk, while the cover of the unit is completely solder sealed to minimize RFI.

All modules feature anti-corrosive plating, nickel plated machine threaded brass connectors and comply with all SCTE Standards.

Please contact us for additional technical support or product information.

**THREE YEAR PARTS AND LABOR
WARRANTY INCLUDED**

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MODEL T2XS-TM / TRIPLE 2-WAY SPLITTER WITH TEST PORT



MODEL D4XS-TM / DUAL 4-WAY SPLITTER WITH TEST PORT



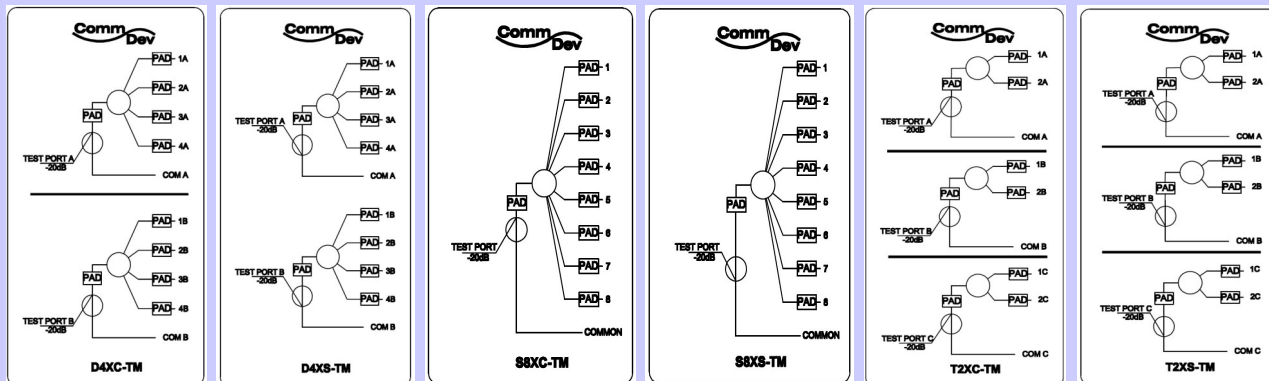
MODEL S8XS-TM / SINGLE 8-WAY SPLITTER WITH TEST PORT

Insertion Loss

(Maximum Values Shown, Typical Values are 0.2-to-0.5dB Better)

Module Type	Model #	Frequency					
		5-10MHz	10-48MHz	48-550MHz	550-870MHz	870-1002 MHz	1002-1218 MHz
Combiner	S8XC-TM	10.6dB	10.5dB	11.3dB	12.1dB	12.6dB	13.8dB
Splitter	S8XS-TM	10.6dB	10.5dB	11.2dB	11.9dB	12.5dB	13.8dB
Combiner	D4XC-TM	7.2dB	7.1dB	7.7dB	8.3dB	8.7dB	9.8dB
Splitter	D4XS-TM	7.3dB	7.2dB	7.8dB	8.5dB	8.8dB	9.8dB
Combiner	T2XC-TM	3.9dB	3.8dB	4.2dB	4.8dB	5.0dB	5.8dB
Splitter	T2XS-TM	3.9dB	3.8dB	4.3dB	4.8dB	5.0dB	5.8dB

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Return Loss all "In" or "Out" Ports
 (Minimum Values Shown, Typical Values are 1-to-3dB better)

Model	Frequency					
	5MHz ←→ 1218MHz					
	5-10MHz	10-48MHz	48-200MHz	200-750MHz	750-1000MHz	1000-1218MHz
All Modules	20dB	20dB	20dB	20dB	20dB	20dB

Isolation Port to Port
 (Minimum Values Shown, Typical Values are 3-to-5dB Better)

Module Type	Model #	Frequency					
		5MHz ←→ 1218MHz					
		5-10MHz	10-48MHz	48-200MHz	200-750MHz	750-1000 MHz	1000-1218 MHz
Combiner	S8XC-TM	30dB	30dB	30dB	30dB	30dB	30dB
Splitter	S8XS-TM	30dB	30dB	30dB	30dB	30dB	30dB
Combiner	D4XC-TM	30dB	30dB	30dB	30dB	30dB	30dB
Splitter	D4XS-TM	30dB	30dB	30dB	30dB	30dB	30dB
Combiner	T2XC-TM	30dB	30dB	30dB	30dB	30dB	30dB
Splitter	T2XS-TM	30dB	30dB	30dB	30dB	30dB	30dB

Part Number Reference: "TM" Series Passive Module Model with "MP" ATT/EQ

First	Second	Third	Fourth	Fifth	Sixth
"T" Triple	"2" 2-way	"X" Extra Broadband Modular Passives Frequency Band 5-1218MHz	"S" Splitter "C" Combiner	"T" Test Port -20 dB±0.5dB	"M" MP-ATT/EQ
"D" Dual	"4" 4-way				
"S" Single	"8" 8-way				

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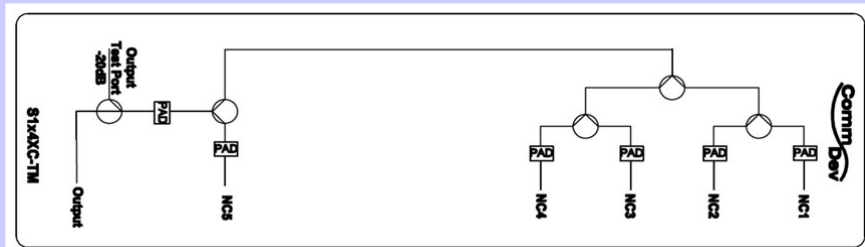
Custom Narrowcast Module Model S1x4XC-TM

Features & Benefits

- * CommDev Modules are designed to be installation compatible within CommDev, Maxnet, or ADC SignalOn Series Chassis
- * The module provides for the signal insertion of:
4-Narrowcast Inputs (NC1–NC4),
1-Broadcast Input (NC5).
- * Micro Plug-In sockets allow for insertion of attenuators and equalizers.
- * Attenuator values from 1-20dB
- * Equalizers values from 1.5-18dB.
- * Engineered for excellent flatness and a minimal insertion loss within the frequency range of 5-1218 MHz.
- * Engineered for a minimum of 40dB isolation between each of the two input sections, and a minimum return loss specification of 20dB

THREE YEAR PARTS AND LABOR
WARRANTY INCLUDED

CommDev has designed and engineered a new passive narrowcast modular passive which is installation compatible with CommDev HPS, Maxnet, or ADC SignalOn Series Chassis. The module occupies a single slot of a modular passive chassis and is specially designed to achieve a minimum level of -40dB Isolation within the operational frequency range of 5-1218MHz between BC and NC Inputs.



Functional Block Diagram Shown Above / Model S1x4XC-TMa

The configuration of the new module design begins with a standard Dual 4-way combiner, whereas the Die Cast housing of the module is internally separated into two separate cavities.

In this custom arrangement, a 4-way combiner occupies the first cavity (4-Narrowcast Inputs), and a 2-way combiner (Broadcast Input) within the other cavity. There is an internal connection made between the common output of the 4-way combiner and one of the two inputs of the 2-way combiner. The remaining input port of the 2-way combiner is external, and allows for insertion from the CCAP plant. The unit is designed with a Micro Plugin socket for placement of either a Micro attenuator or an equalizer at each of the Narrowcast Inputs (designated as NC1–NC5)

All Input and Output ports are placed on the rear side of the module, while the Test Port and Attenuators have access from the front side of module to simplify Output signal balancing.

CommDev modular passives are designed with internal walls which prevent any cross talk, while the cover of the unit is completely solder sealed to minimize RFI. All modules feature clear labeled port identification, anti-corrosive plating, SCTE standards compliant, with nickel plated, and machine threaded brass connectors.

Please contact us for additional technical support
or product Information.

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Insertion Loss

(Maximum Values Shown, Typical Values are 0.2-to-0.5dB Better)

Model	48MHz ←————→ 1218MHz			
	48-550MHz	550-870MHz	870-1002MHz	1002-1218MHz
NC5 to Output	-4.3dB	-4.8dB	-5.2dB	-5.8dB
NC1÷4 to Output	-11.1dB	-12.0dB	-12.6dB	-13.5dB
Test Port	-20±0.5dB	-20±0.5dB	-20±0.5dB	-20±0.5dB

Return Loss

(Minimum Values Shown, Typical Values are 1-to-3dB better)

Model	48MHz ←————→ 1218MHz			
	48-550MHz	550-870MHz	870-1002MHz	1002-1218MHz
All Ports	-20dB	-20dB	-20dB	-20dB

Isolation Port to Port

(Minimum Values Shown, Typical Values are 3-to-5dB better)
 (Minimum Values Shown, Typical Values are 3-to-5dB better)

Model	48MHz ←————→ 1218MHz			
	48-550MHz	550-870MHz	870-1002MHz	1002-1218MHz
"NC5" - "NC1÷4"	-40dB	-40dB	-40dB	-40dB
"NC" - "NC"	-30dB	-30dB	-30dB	-30dB