

1.2 GHz DIGITAL SPLITTERS

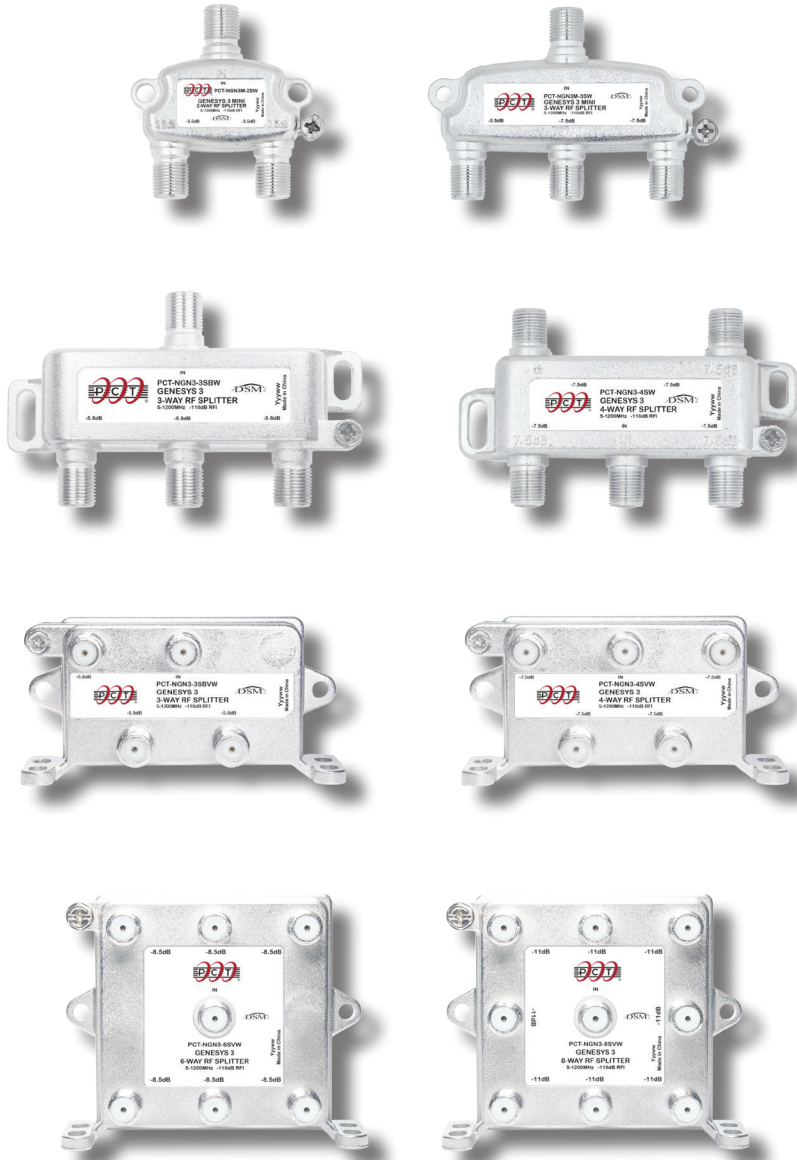
Genesys 3

PCT-NGN3-xSW, -xSBW, -xSVW, -xSBVW

& PCT-NGN3M-xSW



Innovation for the Last Mile®



STANDARD FEATURES

PCT's Genesys 3 digital splitters offer exceptional performance at 1.2 GHz and long-term reliability for drop installations, particularly in systems with cable modem applications. This newest generation enables MSOs to confidently upgrade their network hardware as they rollout services made possible by DOCSIS 3.1. Included in the Genesys 3 Series splitters is PCT's patented Digital Seizure Mechanism (DSM®), providing significant advantages in center conductor retention, surface contact area and electrical performance.

Features and Benefits

- ✓ Excellent performance in the expanded return path range of DOCSIS 3.1
- ✓ Expanded bandwidth in the downstream to allow for the higher data rates provided by DOCSIS 3.1
- ✓ Superior intermodulation distortion and second harmonic performance
- ✓ Excellent return loss and port-to-port isolation in the return band
- ✓ Soldered back plate for excellent RFI performance
- ✓ Patented PCT DSM® seizure technology (patent #6450836)
 - Provides increased spring retention for better surface contact, even after repeated entry, across minimum to maximum center conductor diameters
 - Beryllium copper construction for better corrosion resistance, impedance matching, and prevention of common path distortion
- ✓ 6 kV surge withstand, excellent second order harmonics performance after 10 surges to each port per IEEE C62.41-1991 Category A3
 - -45 dBmV spurious signals and second harmonics with a +55 dBmV input carrier
- ✓ White bronze plating provides superior defense against long-term corrosion
- ✓ Weather-sealed F ports prevent moisture migration
- ✓ Machine threaded, flat-faced F ports for improved ground plane contact
- ✓ Conforms to all applicable SCTE standards

1.2 GHz DIGITAL SPLITTERS

Genesys 3

PCT-NGN3-xSW, -xSBW, -xSVW, -xSBVW & PCT-NGN3M-xSW



Innovation for the Last Mile®

Specifications

PCT-NGN3M-xxxx, PCT-NGN3-xxxx													
DIGITAL SPLITTERS	2-Way		3-Way		3-Way balanced		4-Way		6-Way		8-Way		
Parameters	TYP	GM	TYP	GM	TYP	GM	TYP	GM	TYP	GM	TYP	GM	
Insertion Loss													
	Max (-dB)												
5 to 10 MHz	3.5	3.5	3.5 / 6.8	3.6 / 7.0	5.1	5.5	7.4	7.6	8.4	8.6	10.8	11.0	
10 to 65 MHz	3.5	3.7	3.5 / 6.8	3.6 / 7.0	5.1	5.5	7.3	7.4	8.4	8.6	10.6	10.8	
65 to 470 MHz	3.6	3.8	3.6 / 7.0	3.8 / 7.2	5.4	5.8	7.3	7.4	9.1	9.3	10.8	11.0	
470 to 862 MHz	3.8	4.1	3.7 / 7.5	4.0 / 7.7	5.8	6.1	7.5	7.6	9.8	10.2	11.2	11.5	
862 to 1006 MHz	3.9	4.3	3.8 / 7.8	4.1 / 8.1	6.1	6.5	7.7	7.9	10.0	10.4	11.5	11.8	
1006 to 1200 MHz	4.2	4.6	4.0 / 8.1	4.3 / 8.5	6.6	7.0	8.1	8.5	10.8	11.3	12.2	12.7	
Out-to-Out Isolation													
	Min (-dB)												
5 to 10 MHz	30.0	25.0	30.0	25.0	30.0	25.0	30.0	25.0	28.0	25.0	28.0	25.0	
10 to 65 MHz	36.0	35.0	36.0	35.0	35.0	33.0	36.0	35.0	33.0	31.0	33.0	31.0	
65 to 470 MHz	30.0	28.0	30.0	28.0	29.0	27.0	30.0	28.0	29.0	27.0	29.0	27.0	
470 to 862 MHz	28.0	25.0	28.0	25.0	25.0	23.0	28.0	25.0	25.0	23.0	25.0	23.0	
862 to 1006 MHz	26.0	24.0	26.0	24.0	25.0	23.0	26.0	24.0	24.0	22.0	24.0	22.0	
1006 to 1200 MHz	23.0	22.0	23.0	22.0	23.0	22.0	23.0	22.0	23.0	22.0	23.0	22.0	
Input Return Loss													
	Min (-dB)												
5 to 10 MHz	22.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	
10 to 65 MHz	25.0	23.0	25.0	23.0	25.0	23.0	25.0	23.0	25.0	23.0	25.0	23.0	
65 to 1006 MHz	22.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	
1006 to 1200 MHz	22.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	
Output Return Loss													
	Min (-dB)												
5 to 10 MHz	22.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	
10 to 65 MHz	25.0	23.0	25.0	23.0	25.0	23.0	25.0	23.0	25.0	23.0	25.0	23.0	
65 to 1006 MHz	22.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	
1006 to 1200 MHz	22.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	22.0	20.0	

General Specifications

- ✓ Nominal Impedance 75 Ohms
- ✓ Flatness (Tap & Out) ± 0.5 dB
- ✓ RFI -110 dB
- ✓ Surge Withstand IEEE C62.41-1991 Category A3 (6000 V, 200 Amp, 0.5 µs-100 kHz Ring Wave)
- ✓ Spurious Signals Including Second Harmonics -45 dBmV, after 10 surges of A3 6 kv on each port measured with a +55 dBmV return input carrier
- ✓ Blocking Capacitors All ports
- ✓ Operating Temperature -40 to +60° C (-40 to +140° F)
- ✓ Regulatory Compliance CE

Ordering Information

Splitter, 1.2 GHz, Drop, Genesys 3 Horizontal

- ✓ PCT-NGN3M-2SW 2-Way, Mini
- ✓ PCT-NGN3M-3SW 3-Way, Mini
- ✓ PCT-NGN3-3SBW 3-Way, Balanced
- ✓ PCT-NGN3-4SW 4-Way

Vertical

- ✓ PCT-NGN3-3SVW 3-Way
- ✓ PCT-NGN3-3SBVW 3-Way, Balanced
- ✓ PCT-NGN3-4SVW 4-Way
- ✓ PCT-NGN3-6SVW 6-Way
- ✓ PCT-NGN3-8SVW 8-Way



US Patent Nos. 6450836 B1.

STAY INFORMED - FOLLOW US



Call +1.800.306.8948 for more information

2260 W Broadway Rd | Mesa AZ 85202-1898 | USA | pctinternational.com

PCT.DS.SPL.NGN3.20150615
© 2015 PCT International, Inc.
DSM, Innovation for the Last Mile and PCT are registered trademarks of PCT International, Inc. Specifications subject to change without notice.