

Signia Splitters&Taps 1.3GHz DKTCOMEGA

The Signia Over and over again all CATV network operators face faults in their network caused by defect interconnections between cables and network components. The cause is either that the cable connector has loosened or the connector on the network component is corroded. The connectors loosen due to vibration, temperature changes and the physical behavior of the metal of which the connectors are made, it cold-flows. Clod-flow is a characteristic of "soft" metals like zinc and aluminum, which means that over time these metals deform even at low temperatures, e.g. due to the stress from the thermal contraction of the attached cables during the cold winter time. The DKT Signia product series has connectors made in brass, which does not cold-flow. In addition the connectors are plated with a nickel-tin alloy, which is very resistance to corrosion. High quality cable connectors are also made in brass with nickel-tin plating. In conclusion, using the Signia products improves the operation of the CATV network considerably.

Electrically the Signia product series has a low failure rate, too. All splitters and taps in the network contain ferrite cores. At high powers these cores are driven above their linear range of operation; hence signals are intermixed (called passive intermodulation). This is observed as an increased noise in the network, which might result in periodic failures that can be extremely difficult to localize and correct. In the Signia product series the ferrite cores have a much higher linear range of operation. All ferrite cores have a memory effect; when the cores are exposed to a strong signal their linear range of operation is narrowed permanently. The ferrite cores used in the Signia product series are more resistant to this effect. And in addition there is a built-in protection in the Signia product series that protects the ferrite cores against unwanted strong signals.

- Class A
- AC Block
- Resistant to passive intermodulation
- Surge pulse protection
- Protected against dust & humidity
- Corrosion-free
- Return loss Grade 1 5-10MHz > 20 dB









Signia Splitters

Type no.		Inse	rtion loss		Isolation					
	10-470	470-862	862-1006	1006-1300	10-470	470-862	862-1006	1006-1300		
SiS 02	3.3	3.5	3.7	4.0	34/28	30/23	29/22	24/20		
SiS 03	5.2	5.6	5.8	6.2	32/25	32/25	24/20	22/20		
SiS 03A	3.3 6.6	3.7 7.0	3.8 7.3	4.2 7.8	32/24	30/24	30/24	28/21		
SiS 04	6.6	7.1	7.5	7.9	35/24	30/22	30/20	30/20		
SiS 06	8.4	9.0	9.4	9.9	33/23	28/20	28/20	28/20		
SiS 08	10.1	10.7	11.2	11.9	33/24	32/22	31/20	30/20		

Accessories for Sinia taps and splitters

Signia taps and splitters can be fitted with a set of spacesrs - type name »Signia FS «to allow easy installation of cables. With a height of 8mm it allows space for the most commonly used intallation cables.





1-way taps

Type no.	Tap loss		Inse	rtion loss			Isolatio	n TAP-OU	 Γ
31	10-1300	10-470	470-862	862-1006	1006-1300	10-470	470-862	862-1006	1006-1300
SiT 1-6	6.6 (±0.6)	2.3	2.8	3.0	3.1	27/22	22/20	22/20	22/20
SiT 1-8	8.3 (±0.6)	1.7	2.1	2.4	2.8	27/22	23/20	22/20	22/20
SiT 1-10	10.0 (±0.6)	1.0	1.4	1.8	2.4	33/24	30/21	25/20	25/20
SiT 1-12	12.1 (±0.6)	0.7	1.0	1.2	1.8	30/24	27/22	25/21	24/20
SiT 1-16	16.0 (±0.6)	0.6	0.8	1.0	1.6	36/28	30/23	25/22	25/21
SiT 1-20	20.0 (±0.6)	0.6	0.8	1.0	1.6	36/28	32/24	27/22	28/21
SiT 1-24	24.1 (±0.6)	0.6	0.8	1.0	1.3	36/28	35/26	30/24	30/21
SiT 1-30	30.2 (±0.6)	0.6	0.8	1.0	1.3	40/28	38/28	36/25	35/23

2-way taps

Type no.	Tap loss		Inse	rtion loss	l .		Isolation TAP-OUT				Isolation TAP-TAP			
	10-1300	10- 470	470- 862	862- 1006	1006- 1300	10- 470	470- 862	862- 1006	1006- 1300	10- 470	470- 862	862- 1006	1006- 1300	
SiT 2- 8	8.5 (±0.8)	3.2	3.5	3.7	3.9	35/26	30/22	24/21	24/20	31/25	31/22	29/21	27/21	
SiT 2- 10	10.2 (±0.8)	1.9	2.7	3.2	3.8	35/26	34/24	29/22	27/20	35/29	34/27	32/26	31/22	
SiT 2- 12	12.4 (±0.8)	1.2	1.7	2.1	2.4	36/26	34/24	29/22	27/20	40/32	38/30	36/28	34/25	
SiT 2- 16	16.0 (±0.8)	1.1	1.3	1.6	2.1	38/26	30/23	29/22	27/20	45/34	38/34	36/32	36/28	
SiT 2- 20	20.1 (±0.8)	1.1	1.4	1.6	2.1	42/28	35/24	31/22	27/20	60/35	52/35	46/33	43/31	
SiT 2- 24	24.0 (±0.8)	1.1	1.5	1.7	2.2	44/30	37/25	33/24	29/22	64/35	60/35	51/35	49/34	

3-way taps

Type no.	Tap loss	Insertion loss					Isolation	TAP-OU	Т	Isolation TAP-TAP			
	10-1300	10-	470-	862-	1006-	10-	470-	862-	1006-	10-	470-	862-	1006-



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		470	862	1006	1300	470	862	1006	1300	470	862	1006	1300
SiT 3- 16	16.1 (±0.8)	2.0	1.9	2.2	2.7	35/24	32/22	28/21	25/20	50/34	45/32	41/32	37/30
SiT 3- 20	20.1 (±0.8)	1.2	1.5	1.7	2.2	44/28	33/22	29/21	25/20	59/34	51/32	44/32	42/30

4-way taps

T-way	шрь					-								
Type no.	Tap loss		Insertion loss				Isolation TAP-OUT				Isolation TAP-TAP			
	10-1300	10- 470	470- 862	862- 1006	1006- 1300	10- 470	470- 862	862- 1006	1006- 1300	10- 470	470- 862	862- 1006	1006- 1300	
SiT 4- 12	12.4 (±0.8)	3.7	3.8	4.1	5.0	32/24	31/22	27/20	25/20	48/35	43/32	40/30	38/28	
SiT 4- 16	16.1 (±0.8)	2.7	2.8	2.9	3.6	34/24	31/21	27/21	25/20	50/36	45/34	42/32	40/30	
SiT 4- 20	20.0 (±0.8)	1.5	1.8	2.1	2.6	43/24	40/21	30/21	27/20	52/38	47/36	45/34	43/32	
SiT 4- 24	24.1 (±0.8)	1.5	1.8	2.1	2.6	43/25	40/24	33/22	29/20	54/38	49/36	47/34	45/32	
SiTT 4- 12*	12.3 (±0.9)	-	-	-	-	-	-	-	-	43/32	36/32	34/30	32/28	

6-way taps

Type no.	Tap loss	Insertion loss					Isolation TAP-OUT				Isolation TAP-TAP			
	10-1300	10- 470	470- 862	862- 1006	1006- 1300	10- 470	470- 862	862- 1006	1006- 1300	10- 470	470- 862	862- 1006	1006- 1300	
SiTT 6- 14*	14.1 (±0.8)	-	-	-	-	-	-	-	-	40/34	40/32	38/30	34/28	

8-way taps

Type no.	Tap loss	Insertion loss				Isolation TAP-OUT				Isolation TAP-TAP			
	10-1300	10- 470	470- 862	862- 1006	1006- 1300	10- 470	470- 862	862- 1006	1006- 1300	10- 470	470- 862	862- 1006	1006- 1300
SiTT 8- 15*	15.8 (±0.1.1)	-	-	-	-	-	-	-	-	42/36	40/32	40/30	37/28

^{*} SiTT Internally terminated, no OUT port

Signia Multitap SiM 13-NL-F

The multitap is a 13-way tap, where each tap has a different tap loss, in order to compensate for the different cable length between the tap and the subscribers. The multitap is made of materials selected with focus on minimum corrosion (low common path distortion) and minimum cold flow (less loose connectors over time). It is designed and produced using well-proven technologies that has been used in the field for more than 15 years.



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A unique construction of the female F-connector ensures secure connection to the inner conductor of the male connector, and furthermore, the alloy ensures minimal corrosion. This dramatically reduces the likelihood of signal dropout and the subsequent need for network troubleshooting. The tap name, frequency range and all connectors are clearly marked with rugged labels.

				Tap loss			
	5 MHz (dB)	85 MHz (dB)	230 MHz (dB)	470 MHz (dB)	860 MHz (dB)	1006 MHz (dB)	1300 MHz (dB)
TAP 1	12.7	12.4	12.3	12.3	12.3	12.30	12.3
TAP 2	13.3	13.0	12.9	12.9	13.4	13.6	14.6
TAP 3	13.9	13.6	13.5	13.5	14.0	14.2	15.2
TAP 4	14.5	14.2	14.1	14.1	14.6	14.8	15.8
TAP 5	15.1	14.8	14.7	14.7	15.2	15.4	16.4
TAP 6	15.7	15.4	15.3	15.3	15.8	16.0	17.0
TAP 7	16.3	16.0	15.9	15.9	16.4	16.6	17.6
TAP 8	16.9	16.6	16.5	16.5	17.0	17.2	18.8
TAP 9	17.5	17.2	17.1	17.1	17.6	17.8	19.4
TAP 10	18.2	17.9	17.8	17.8	18.3	18.5	20.8
TAP 11	18.8	18.5	18.4	18.4	18.9	19.1	21.7
TAP 12	19.4	19.1	19.0	19.0	19.5	19.7	22.6
TAP 13	20.0	19.7	19.6	19.6	20.1	20.3	23.2

Other tap values and equalizers are available upon request.

Type no.	SiM 13-NL-F
Protection against instrusion (IEC 60529)	IP54
Isolation (TAP-TAP)(EN60728-4)	✓
Screening effectiveness (EN50083-2)	Exceeds Class A
Return loss (EN60728-4)5-10 MHz	Grade 1> 18 dB
Housing	Aluminium alloy, anti corrovsive painting
Connectors	Brass milled, nickel tin plated, F-Female (ANSI/SCTE 01 2006)
Voltage blocking	> 2 kV
Passive IM	Brass milled, nickel tin plated, F-Female (ANSI/SCTE 01 2006)
Voltage blocking	> 125 dB, two carriers 50 and 55 MHz at 120 dBμV
Operating temp.	-25 to +70 °C
Dimensions	185 x 90 x 35 mm
Weight	278 g

