COMEGA®



Cascade



COMEGA® Cascade - the modular passive system



Cascade is designed and developed to meet the needs for flexible internal distribution components, fulfilling the CENELEC CAT A/B standard. New data services delivered via CATV, MATV and SMATV require optimised RF performance across the low and high frequency spectrum with RFi immunity to avoid noise ingress.

COMEGA® Cascade is characterised by its compact design with the ability to fit heavy cables on the input/output connectors. Installers can Cascade the taps and splitters and thereby assemble 2-, 3-, 4- and 20-way splitters and taps meeting the specific needs of the internal distribution network. Overleaf, some applications and examples are shown as a design guide.

With the **COMEGA**® series, return loss and tap to tap isolation is optimised to maintain linearity of digital transmissions and suppression of adjacent tap signals.

COMEGA® Cascade passive line is very suitable for installations in blocks of flats, CATV networks and similar projects where heavy distribution cables are used.

We trust that the built-in-flexibility and our focus on making it possible to deliver high-class electrical data will help operators and installers alike trouble-free broadband transmissions for years to come.

COMEGA® Cascade - for future flexible internal installations



Low loss Cascade

	Type no.	Attenuation all ports dB (±0.25)			Isolation dB (±1)			Return loss dB (±1)			
	MHz	5-600	600-860	860-1000	5-6 00	600-860	860-1000	5-600	600-860	860-1000	
COMEGA	LLSC 02A	3.6	3.8	4.2	28	28	24	22	20	18	
	LLSC 02B	3.6	3.8	4.2	28	28	24	22	20	18	
COMEGA	LLSC 2 - 8	3.6 7.7	3.8 8.0	4.2 8.4	26	25	24	22	20	20	



	Type no.		tenuat Il ports ((±0.5)	łВ	Isolation dB (±1)			Return loss dB (±1)			
	MHz	40-860	860-1750	1750-2300	40-860	360-175	0 1750-2300	40-860	860-175	0 1750-2300	
1	C-SAT 02A	3.8	4.8	5.7	22	24	17	15	12	12	*
J	C-SAT 02B	3.8	4.8	5.7	22	24	17	15	12	12	*





Low loss Cascade

Type no.	Through loss dB (±0.25)	Tap loss dB (± 0.75)	Isolation Tap to tap (2xLLTC) dB	Directivity* Tap to out dB					
MHz	60 0-86 0 5-6 00 860-100 0	600-860 5-600 860-1000	600-860 5-600 860-1000						
LLTC 1-6	2.3 2.3 2.6	6.8 6.5 6.5	25 23 23	23					
LLTC 1-10	1.0 1.3 1.7	10.0 9.5 9.0	40 36 32	30					
LLTC 1-12	0.7 0.8 1.0	12.0 12.0 12.0	40 36 32	32					
LLTC 1-16	0.4 0.5 0.7	16.5 16.5 16.5	46 42 38	36					
LLTC 1-20	0.4 0.5 0.7	20.0 20.2 20.3	54 50 46	40					

Type no.	Through loss dB (±0.4)			Ta	p 1 lo dB (±1.0)	OSS	l ap 2 loss dB (±1.0)			Isolation Tap to tap dB		- 1	Directivity* Tap to out dB
MHz	600-860 5-600 860-1000		600-860 5-600 860-1000		600-860 5-600 860-1000		60 0-86 0 5-600 860-100 0						
LLTC 2 - 10	2.9	2.9	3.5	10.3	10.0	9.5	10.5	10.5	10.5	40	36	32	30
LLTC 2 - 12	1.6	1.5	1.7	12.5	12.5	12.8	12.9	12.8	12.6	50	40	38	32
LLTC 2 - 16	0.8	1.0	1.2	16.5	16.8	17.0	17.0	16.8	16.5	46	42	40	37
LLTC 2 - 20	0.8	1.1	1.4	20.0	20.0	20.0	20.0	19.8	19.5	45	42	41	40
LLTC 2 - 24	0.7	0.8	0.9	24.0	24.0	24.0	24.0	24.0	24.5	40	40	40	45
LLTC 2 - 28	0.4	0.5	0.6	28.0	28.2	28.3	28.0	28.0	28.0	40	40	40	45

Terrestrial and Satellite IF

Type no.	Through loss dB (±1.0)		Tap 1 loss dB (±2.0)	Tap 2 loss dB (±2.0)	Тар	ation to tap B	Directivity Out to tap dB	
MHz	MHz 46-860 860-2150		40-2150	40-2150	40-860	860-2150	40-2150	
C-SAT 2-10	SAT 2-10 4.0 5.0		10	10	30	20	20	**
C-SAT 2-15	3.0	4.0	15	15	36	25	20	**



* 40 - 1000 MHz - 1.5 / oct. Return loss: 5 - 40 MHz: min. 20 dB

40 - 1000 MHz: min. 20 dB -1.0 dB/oct.

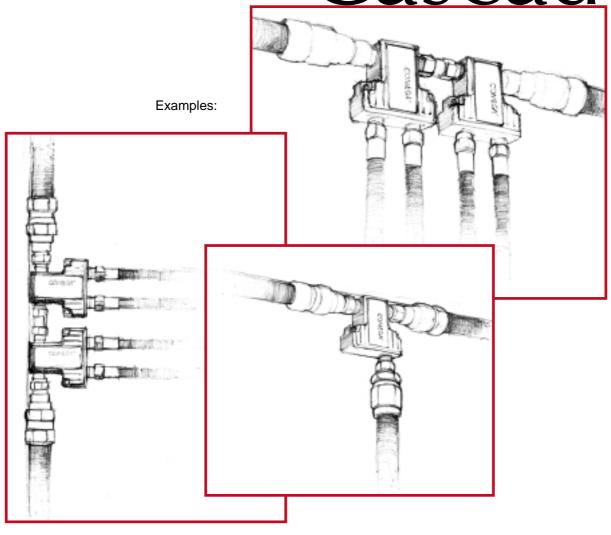
40 - 2150 MHz: > 12 dB

RFi / Screening efficiency: 100 dB (5 - 1000 Mhz) > Class A

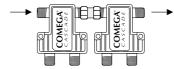


^{**} AC/DC max 0.5A

<u>Cascade</u>



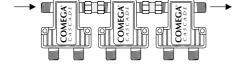
Combination examples ..:



LLTC 2-12

4 tap, att.: 2 x 12 dB + 2 x 13.5 dB

Through loss: 3 dB



LLTC 2-16 1 x LLTC 2-12 6 tap, att.: 2 x 16 dB + 2 x 17 dB + 2 x 14 dB

Through loss: 3 dB

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