

Splitters and Taps

Part of the PROception core range for the professional aerial and system installer, these fully-screened network passive components cover most requirements in small and medium-sized MATV and IRS systems.

These products are suitable for indoor use only, unless mounted in a suitable waterproof and condensation-free housing.

5 – 862 MHz Ranges

- Fully-screened diecast housings with 'F' connectors throughout.
- 2-, 3-, 4-, 6- and 8-way splitters/combiners, with line-power pass on some models.
- 1-, 2-, 4-, and 8-way taps, each available in a choice of four tap loss values.
- 8-way 'multi-tap' with graded tap values between 12.5 dB and 19.5 dB – ideal for feeding outlets in a star- or bush-wired system with a range of drop-cable lengths.



Technical data

Product code	Ways	Maximum insertion loss			Minimum isolation ²			Power pass ³
		HF ¹	VHF ¹	UHF ¹	HF ¹	VHF ¹	UHF ¹	
Splitters / combiners 5 .. 862 MHz								
proSPL204	2	4.0 dB	3.7 dB	4.2 dB	10 dB	22 dB	18 dB	Yes
proSPL306	3	6.3 dB	6.5 dB	7.0 dB	12 dB	20 dB	17 dB	Yes
proSPL408	4	7.5 dB	7.7 dB	8.0 dB	15 dB	20 dB	17 dB	Yes
proSPL611	6	11.0 dB	11.0 dB	11.5 dB	18 dB	18 dB	16 dB	No
proSPL812	8	12.0 dB	12.0 dB	12.5 dB	18 dB	22 dB	18 dB	No

Notes

1. See general data overleaf for frequency band definitions.
2. Isolation figures apply with a good 75 Ω match at the common port.
3. Products with power pass capability have DC continuity between all ports. Power pass rating 24 V max. AC/DC at 400 mA max. (100 mA on type proSPL408). Products without power pass capability have all ports DC-blocked, except for the common port on type proSPL812 which is DC-grounded and may be damaged if powered.

Technical data

Product code	Ways/dB	Tap loss ¹	Max. trunk through loss	
			HF-VHF ²	UHF ²
1-way taps				
5 .. 862 MHz				
proTAP108	1/8	8.5 dB	2.5 dB	2.8 dB
proTAP112	1/12	12.5 dB	1.1 dB	1.6 dB
proTAP116	1/16	16.0 dB	1.0 dB	1.3 dB
proTAP120	1/20	20.0 dB	1.0 dB	1.3 dB
2-way taps				
5 .. 862 MHz				
proTAP208	2/8	8.5 dB	4.0 dB	4.5 dB
proTAP212	2/12	12.5 dB	1.8 dB	2.0 dB
proTAP216	2/16	16.0 dB	1.2 dB	1.7 dB
proTAP220	2/20	20.0 dB	1.2 dB	1.7 dB
4-way taps				
5 .. 862 MHz				
proTAP408	4/8	7.5 dB	Internally terminated	
proTAP412	4/12	11.0 dB	3.6 dB	4.1 dB
proTAP417	4/17	17.0 dB	1.7 dB	1.9 dB
proTAP420	4/20	20.0 dB	1.0 dB	1.5 dB
8-way taps				
5 .. 862 MHz				
proTAP812	8/12	12.0 dB	Internally terminated	
proTAP814	8/14	14.0 dB	3.7 dB	4.1 dB
proTAP817	8/17	17.0 dB	2.5 dB	2.7 dB
proTAP820	8/20	20.0 dB	1.2 dB	1.9 dB
8-way multi-tap				
5 .. 862 MHz				
proTAP817M	8/variou	Note 3	9.8 dB ⁴	9.0 dB

Notes

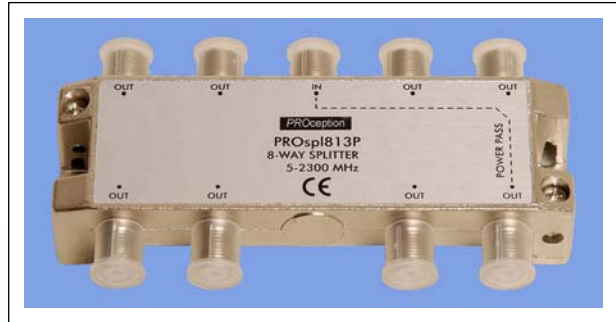
1. Worst-case tolerance on tap loss is ± 1.5 dB.
2. See general data overleaf for frequency band definitions.
3. This product has eight graded tap outputs with tap loss values as follows: 12.5, 13.5, 14.5, 15.5, 17.0, 17.5, 19.0 and 19.5 dB.
4. 9.0 dB over the band 47 .. 230 MHz.
5. **Important:** these items do not have power-pass capability. Some ports are not DC-blocked; reverse powering may cause damage.



Splitters and Taps

5 – 2300 MHz Range

- Fully-screened diecast housings with 'F' connectors throughout.
- 2-, 3-, 4-, 6- and 8-way splitters / combiners, all with line-power pass capability to one output – ideal for splitting LNB outputs to feed two or more multiswitches.
- 2-way taps in a choice of four tap values, with trunk line-power pass capability.



Technical data

Product code	Ways	Maximum insertion loss				Minimum isolation ²			
		HF ¹	VHF ¹	UHF ¹	SAT ¹	HF ¹	VHF ¹	UHF ¹	SAT ¹
Splitters / combiners									
5 .. 2300 MHz									
proSPL204P	2	4.5 dB	4.0 dB	4.7 dB	5.8 dB	10 dB	20 dB	20 dB	16 dB
proSPL308P	3	7.5 dB	6.8 dB	7.5 dB	10.0 dB	16 dB	20 dB	20 dB	16 dB
proSPL409P	4	8.5 dB	8.3 dB	9.0 dB	11.0 dB	17 dB	20 dB	20 dB	15 dB
proSPL612P	6	12.5 dB	11.5 dB	12.0 dB	16.0 dB	20 dB	20 dB	20 dB	16 dB
proSPL813P	8	13.5 dB	13.2 dB	14.0 dB	17.5 dB	20 dB	20 dB	20 dB	15 dB

Notes

- See general data table below for frequency band definitions.
- All isolation figures apply with a good 75 Ω match at the common port.
- All products have power pass capability between the common port and one output port. All other output ports are DC-blocked. Power pass rating 24 V max. AC/DC at 1 A max.



Technical data

Product code	Ways/dB	Tap loss ¹		Max. trunk through loss			
		HF-UHF ²	SAT ²	HF ²	VHF ²	UHF ²	SAT ²
2-way taps							
5 .. 2300 MHz							
proTAP210P	2/10	10.5 dB	12.0 dB	3.5 dB	3.0 dB	3.4 dB	4.2 dB
proTAP212P	2/12	12.0 dB	13.0 dB	3.5 dB	3.0 dB	3.4 dB	4.2 dB
proTAP215P	2/15	15.0 dB	15.5 dB	2.7 dB	2.0 dB	2.5 dB	3.2 dB
proTAP220P	2/20	20.0 dB	20.0 dB	2.0 dB	1.5 dB	2.1 dB	3.3 dB

Notes

- Worst-case tolerance on tap loss is ± 3 dB.
- See general data table below for frequency band definitions.
- All products have power pass capability between the trunk ports. All tap ports are DC-blocked. Power pass rating 24 V max. AC/DC at 1 A max.

General data

	HF (return)	VHF	UHF	SAT (IF)
Frequency bands on this data sheet	5 .. 47 MHz	47 .. 230 MHz	470 .. 862 MHz	950 .. 2050 MHz ¹
Characteristic impedance	75 Ω			
Connector type	'F' (IEC 60169-24)			
Operating temperature range	-10 .. +40 °C			
EMC standard	BS EN 50083-2:2006			

Notes

- All products on this page are usable to 2300 MHz with slightly increased insertion loss.
- Ports indicated as 'DC-blocked' may be reverse powered (24 V AC/DC max.) without risk of damage.

Performance data given are typical unless otherwise stated, and are not intended to constitute a contractually binding specification. Proception Limited reserves the right to change product designs and specifications without prior notice.