

### Screened Masthead Passive Splitters

An addition to the PROception core range for the professional aerial and system installer, this range of two fully-screened passive splitter/combiner units offers excellent RF performance. The products are ideal for splitting aerial feeds in strong signal areas, where the use of amplifiers is unnecessary. Even with strong signals the use of fully screened accessories is much preferred for digital terrestrial (DTT or DVB-T) applications. Good screening helps to maintain the rejection of impulsive interference picked up on the outer conductor of the aerial downlead. This rejection is largely negated if unscreened 'saddle & clamp' products are inserted in the downlead, undoing the beneficial effects of the aerial's balun.

The splitters can also be used in conjunction with the PROception proCOM band-selective masthead combiners – for example a proCOM21VU diplexer could be used to combine VHF/FM and UHF/TV aerial signals before splitting two or four ways with a proMHS splitter. proMHS splitters are also ideal for use with the proMHD family of masthead preamplifiers in order to increase the number of amplified outputs available.

These units are also suitable for many other wideband splitting or combining applications, particularly where an outdoor-rated housing is required. Both products have DC line-power pass capability between the common input and one output leg, allowing upstream amplifiers to be powered.

#### Range features

- 2-way (proMHS12P) and 4-way (proMHS14P) units available.
- Low insertion loss, excellent impedance matching and high isolation between outputs.
- DC line-power pass to one leg.
- Robust fully-screened diecast RF modules with corrosion resistant finish.
- Well-proven discreet moulded housings which cannot trap water. Suitable for mast or wall mounting.
- 'F' connectors for reliable connection and high screening integrity with a wide range of cable sizes.
- Ideal for both digital and analogue applications – ready for the all-digital future.
- Suitable for use as wideband combiners.



Product New  
2006

### Technical data

proMHS12P, proMHS14P		
	proMHS12P	proMHS14P
Number of outputs	2	4
Signal frequency range	47 .. 862 MHz <sup>1</sup>	47 .. 862 MHz <sup>1</sup>
Insertion loss	≤ 4.2 dB	≤ 8.2 dB
Return loss	≥ 16 dB <sup>2</sup> (VSWR < 1.4)	≥ 16 dB <sup>2</sup> (VSWR < 1.4)
Isolation between outputs	≥ 22 dB	≥ 22 dB <sup>3</sup>
Line-power pass	Between common input <sup>4</sup> and one output <sup>4</sup> only (other outputs are DC-blocked)	
Power pass ratings	20 V max. at 250 mA max.	
Signal connector type	Type-F (IEC 60169-24)	
Operating temperature range	-20 .. +50 °C	
EMC standard	BS EN 50083-2:2001 (Class A)	

#### Notes

1. Usable over 5 to 1000 MHz, typically with no significant degradation of performance.
2. Applies at any port, with all other ports terminated in 75 Ω.
3. Applies between any two outputs, with all other ports terminated in 75 Ω.
4. The units are labelled for use as splitters. When using as combiners the terms "input" and "output" should be interchanged.

*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.*