



# PRO-PHY150-4

4-Channel Hybrid Combiner for 150 MHz Transmitters



## DESCRIPTION

- Combining four transmitters or receivers on the same antenna.
- Better utilization of good antenna position.
- Four antennas on the same transmitter or receiver.
- The only combining option with very small Tx-Tx frequency spacing.
- 30 W load supplied (other loads or no load as option).

## SPECIFICATION

|                             |                                                                       |
|-----------------------------|-----------------------------------------------------------------------|
| Electrical                  |                                                                       |
| Model                       | PRO-PHY150-4                                                          |
| Filter Type                 | Hybrid Junction                                                       |
| Frequency                   | 136 – 175 MHz (see ordering)                                          |
| Max. Input Power            | 40 W per channel (max. 130 W with larger load)                        |
| Insertion Loss              | < 6.3 dB $\pm$ 0.3 dB                                                 |
| Impedance                   | 50 $\Omega$                                                           |
| Isolation Tx1 – Tx2         | > 30 dB (* see note)                                                  |
| VSWR                        | < 1.5:1 with all other ports terminated with 50 $\Omega$              |
| Load                        | 30 W load fitted<br>(other ratings available)<br>(** see note)        |
| No. of channels             | 4                                                                     |
| Environmental               |                                                                       |
| Operating temperature range | -30 °C to +60 °C                                                      |
| Mechanical                  |                                                                       |
| Connection(s)               | N(f) (other on request)                                               |
| Historic Brand              | Amphenol Procom                                                       |
| Dimensions                  | 420 x 89 (incl. conn.) x 42 mm (excl. load) / 16.54 x 3.50 x 1.65 in. |
| Weight                      | Approx. 1.33 kg / 2.93 lb. (excl. load)                               |

## ORDERING CODES

| Model          | Product No. | Frequency     |
|----------------|-------------|---------------|
| PRO-PHY150-4-3 | 210000632   | 130 – 160 MHz |
| PRO-PHY150-4-5 | 210000672   | 140 – 170 MHz |
| PRO-PHY150-4-8 | 210000558   | 150 – 180 MHz |

## ADDITIONAL INFORMATION

### Note

\* The isolation between the Tx ports is directly dependent on the terminating VSWR on the antenna port. With an antenna load VSWR = 1.5, the isolation between the two Tx ports will be reduced to 20 dB @ 5 MHz bandwidth.

\*\* The VSWR of the load's should be < 1.1! Each load should be able to dissipate 3/4 of the input power.  
E.g.: With 50 W input, each load should be able to dissipate  $50 \text{ W} \times 3/4 = 37 \text{ W}$ .

## DIAGRAMS

Diagram 1 Title

