TETRA combiner with VSWR adaption/adjustment network

DESCRIPTION

- Combiner for coupling of four TETRA mobile transceivers on one common antenna.
- Factory-adjusted to either 380 - 410 MHz or 400 - 430 MHz.
- Compact dimensions – especially suitable for mobile applications.
- FME-connectors for direct connection of FME-cable without extra adapter.
- For parallel operation of four two-way communication radios (transceivers) where highest possible decoupling (isolation) is necessary.
- Integrated VSWR adjustment network for optimization of isolation in the frequency range of 380 - 410 MHz or 400 - 430 MHz. Via the adjustment network the effective VSWR of the antenna can be optimized and consequently the isolation between the ports of the combiner clearly improved.
- High isolation obtainable: Up to 60 dB (Dependent on the VSWR of the connected antenna).
- The adjustment of the VSWR adjustment network takes place via built-in variable capacitors.
- Max. TETRA transmitter power 4 x 5 W.
- Also usable as equal power divider for max. 20 W.
- Very small ripple over the total frequency range.

SPECIFICATIONS

Electrical	
Model	PHY-TETRA-4-FME-...
Frequency	380 - 410 MHz or 400 - 430 MHz
Max. Input Power	1 x 20 W if used as divider 4 x 5 W if used as coupler
Impedance	50 Ω
Nominal Divider Loss	6 dB
Total Loss	≤ 7 dB
VSWR	<1.5 (Typ. < 1.25)
No. of channels	4

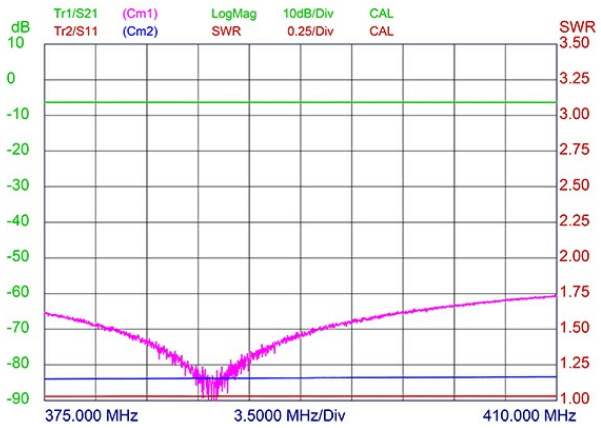
Mechanical	
Connection(s)	FME(m) - connectors
Dimensions	56.7 x 100 (including bottom plate and connectors) x 22 mm / 2.23 x 3.94 (including bottom plate and connectors) x 0.87 in.
Weight	Approx. 0.14 kg / 0.31 lb.
Mounting	4 mm dia. (4 holes)

Environmental	
Operating temperature range	-30 °C to +60 °C

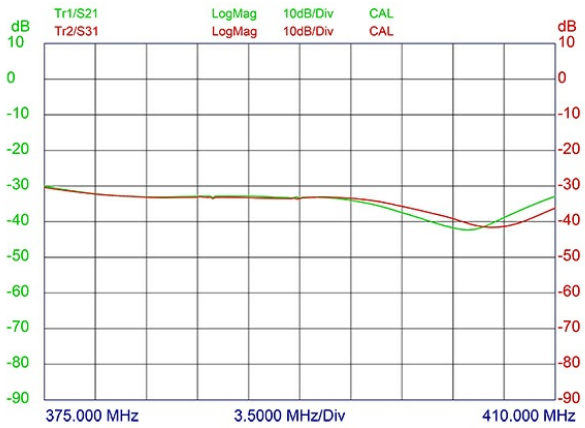
ORDERING

Model	Product No.
PHY-TETRA-4-FME-380-410(m)	210002057
PHY-TETRA-4-FME-400-430(m)	210002058

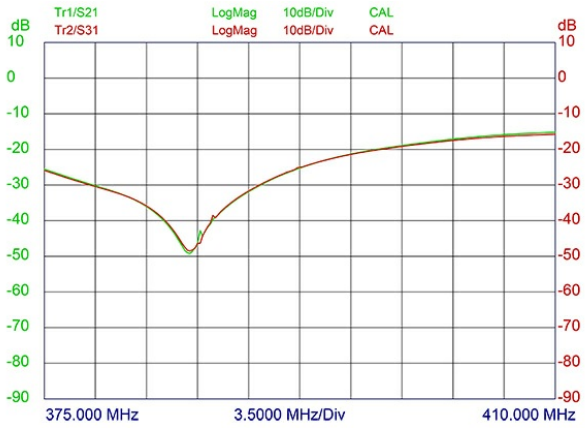
TYPICAL RESPONSE CURVE VSWR 1



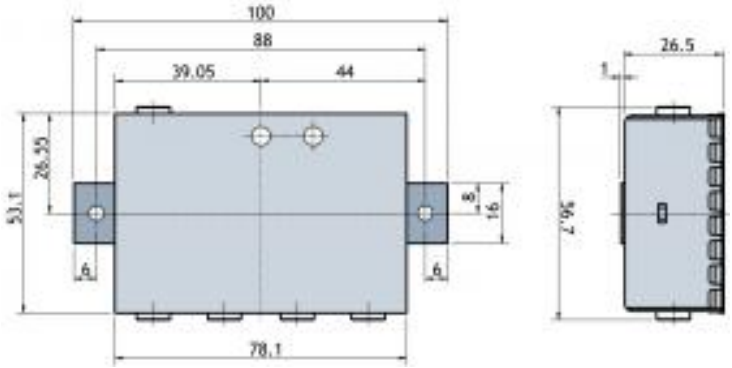
TYPICAL RESPONSE CURVE ANTENNA MU 1-Z/S (WITH 1.5 M CABLE)



TYPICAL RESPONSE CURVE ANTENNA MU 3-BZ/TETRA/L (WITH 1.5 M CABLE)



MOUNTING DETAILS



All dimensions are given in mm.