

## 4 channel compact Mobile Combiner Unit (MCU) for the extended TETRA band

### DESCRIPTION

- The PRO-MCU380-EXT-4 combiner provides the possibility of connecting upto four TETRA extended band radio heads or radios into one common antenna.
- The PRO-MCU380-EXT-4 works in the full Tetra extended band Tx low 380 - 386.5 MHz and Rx high 390 - 396.5 MHz.
- All PRO-MCU couplers are designed for combining radios, each of which transmits a single carrier. When used for combining more repeaters which transmit simultaneously several Tx-carriers on a single port, the Tx-frequency combinations must be checked to avoid unwanted intermodulation products in the Rx band. This is to secure that the used carriers do not create unwanted intermodulation products at the exact Rx-carrier frequencies, which could be reflected to the port of the repeaters and interfere with the wanted Rx signal.
- The smallest and most compact design on the market.
- The MCU combiner is the successor to the PRO-ISO-PHY-TETRA-4
- The isolation between all Tx/Tx, Tx/Rx & Rx/Rx ports are rated to 60 dB, but will typically have a higher isolation than 60 dB.
- The use of high-quality system components such as highly selective helical duplex filters and high-performance isolators provides the high isolation, a low insertion loss and secure a overall stable communication.
- Suitable as here for mobile centers (Mobile Control Stations), and in a reverse model for stationary use (Base Stations).
- Also available with 19" front plate, black, for rack mounting. See "Accessories".
- The MCU combiner secures an ETSI compliant connection.
- Vibration and shock tested in accordance with EN-60068\*\*.

\*\*Tested in accordance with:

Random test: EN 60068-2-64, test specification: EN 300 019-2-5 V3.0.0.

Shock test: EN 60068-2-27, test specification: EN 300 019-2-5 V3.0.0.

Bump test: EN 60068-2-29, test specification: EN 300 019-2-5 V3.0.0.



### SPECIFICATIONS

Electrical	
Model	PRO-MCU380-EXT-4
Frequency	Tx : 380 - 386.5 MHz Rx : 390 - 396.5 MHz
Max. Input Power	25 W per port
Insertion Loss Tx-Ant.	< 9.6 dB (typ. 9.2 dB)
Insertion Loss Rx-Ant.	< 9.6 dB (typ. 9.2 dB)
Isolation TRx - TRx	≥ 60 dB
VSWR	< 1.5:1
Group Delay Variation	Tx-ANT. < 120 nsec. Rx-ANT. < 150 nsec.
No. of channels	4 TMO (Tx/Rx)

Mechanical	
Connection(s)	N(f)
Colour	Black
Dimensions	230 (excl. conn. 25 mm) x 306 x 71.4 mm / 9.06 (excl. conn. 0.98 in.) x 12.04 x 2.81 in.
Weight	Approx. 6.79 kg / 14.97 lb.

Environmental	
Ingress Protection	IP62

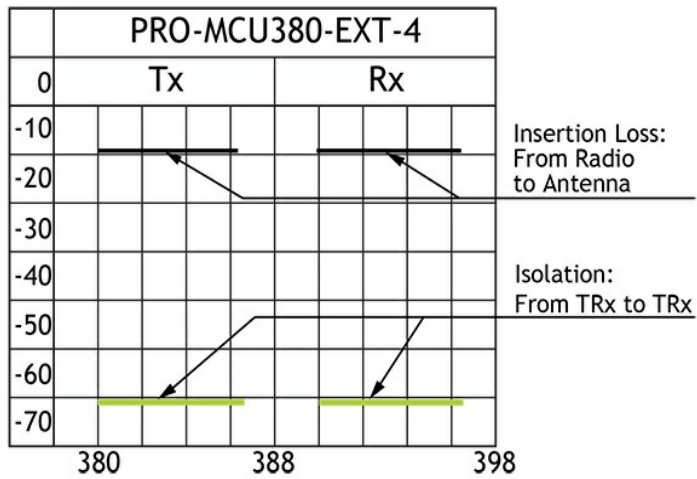
### ORDERING

Model	Product No.	Frequency
PRO-MCU380-EXT-4-N(f)	210002980	Tx: 380 - 386.5 MHz / Rx: 390 - 396.5 MHz
Accessories		
19" Front plate black with connectors in front *	210003010	
19" Front plate black with connectors in back *	210003011	

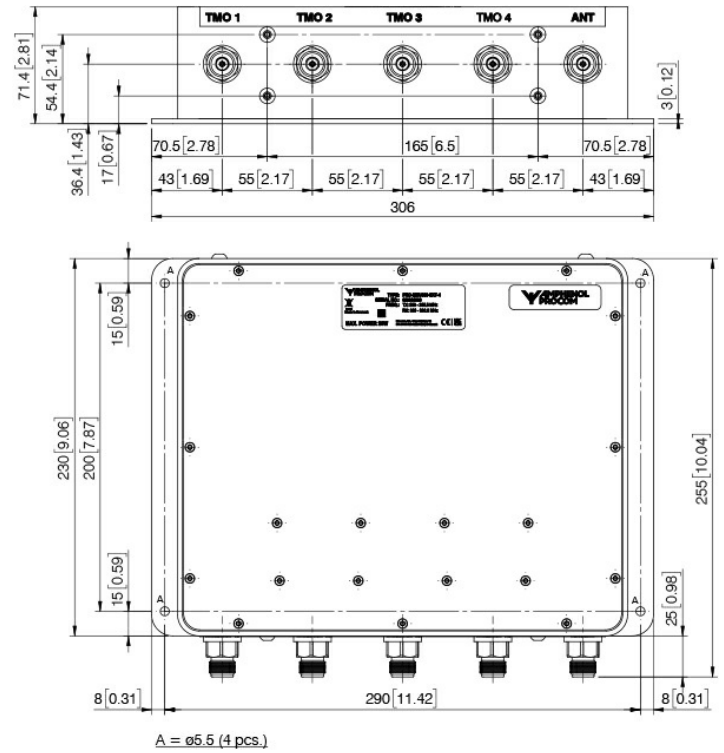
#### \* PLEASE NOTE

The front plates are delivered in a separate packaging with extra screws for mounting on the combiner.

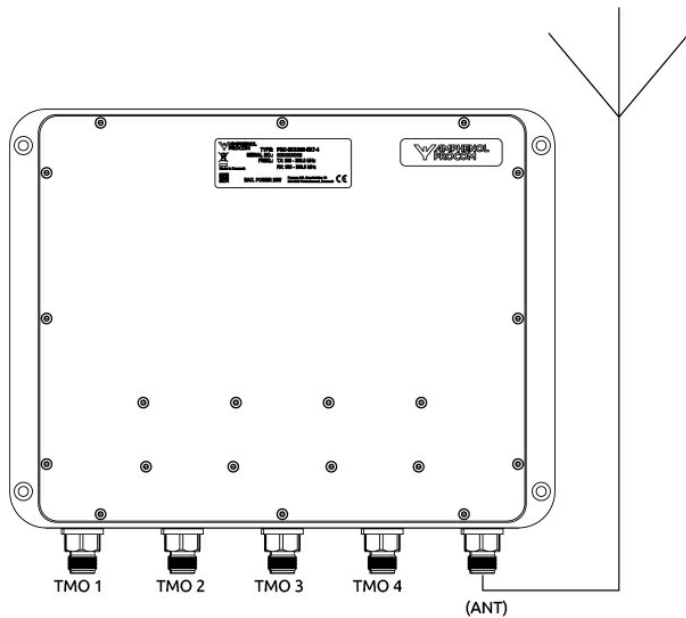
TYPICAL ATTENUATION VALUES



MOUNTING DETAIL



CONNECTION DIAGRAM



All dimensions are given in mm [in.]

19" FRONT PLATE BLACK WITH CONNECTORS IN FRONT (210003010)



19" FRONT PLATE BLACK WITH CONNECTORS IN BACK (210003011)

