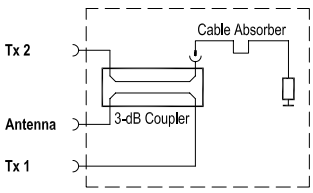
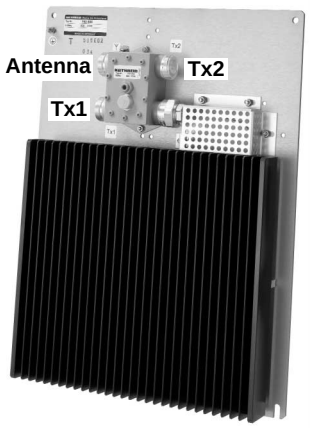
3-dB Coupler with Cable Absorber
800 – 2200 MHz

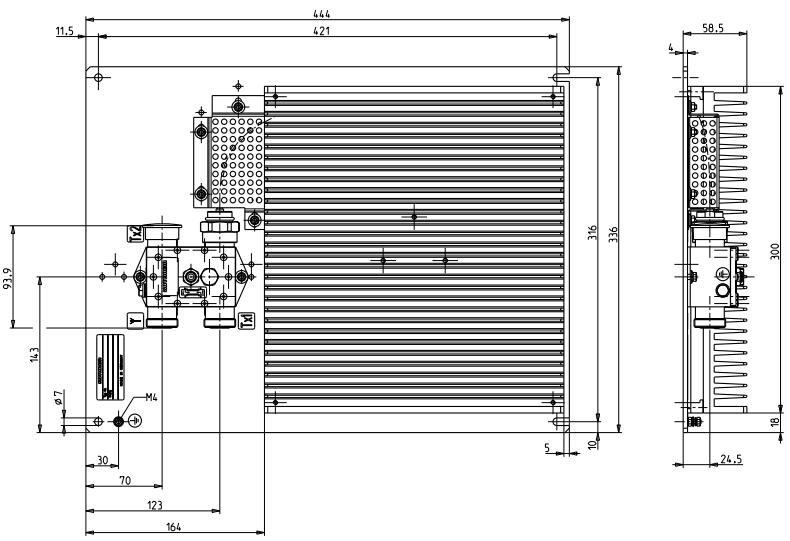
KATHREIN
Antennen · Electronic

The 3-dB Coupler with Cable Absorber is designed to combine two BTS (Base Transceiver Stations) onto one antenna in order to save feeder cable and antenna costs.

- Contrary to standard absorbers, the hereby implemented cable absorber provides excellent intermodulation performance
- The frequency spacing between transmitter signals can be as small as required
- DC signals at Tx1 port are passed to antenna port
- DC signals at Tx2 port are short-circuited
- Suitable for indoor applications







Note:

The 3-dB Coupler with Cable Absorber is designed for a max. input power of 150 W per input (in total 300 W). Wall-mounting of the device is recommended with the cooling ribs running in a vertical direction (see photo) in order to dissipate the max. heat power of 150 W and not to over-heat the unit.

When installed in a 19˝ rack, it must be ensured that the max. heat power of 150 W is sufficiently dissipated, so that the ambient temperature does not rise above +50 °C. This can be achieved for example by the additional installation of a correspondingly dimensioned ventilator in the 19˝ rack or by reducing the maximum input power.

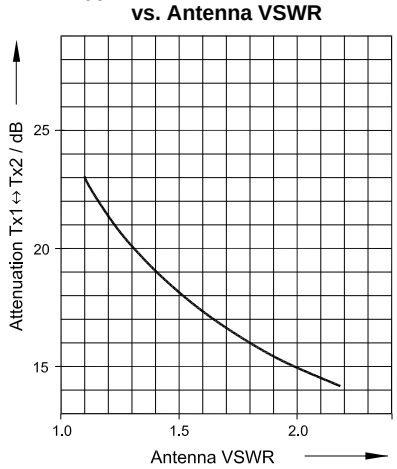
The max. connector coupling torque of 25 Nm is not to be exceeded.

Technical Data

Type No.	793 555
Frequency range	800 – 2200 MHz
Attenuation Tx1 → Antenna Tx2 → Antenna Tx1 ↔ Tx2	 3 ±1.2 dB 3 ±1.2 dB See diagram
VSWR	< 1.2
Impedance	50 Ω
Input power	< 150 W per Tx port with max. 16 signals at each port
Intermodulation products	< –160 dBc (3rd order; with 2 x 20 W)
Temperature range	–20 … +50 °C
Connectors	7-16 female
Application	Indoor
Special features	DC signals at **Tx1** port are passed to **Antenna** port DC signals at **Tx2** port are short-circuited
Mounting	Wall mounting: With 4 screws (max. 7 mm diameter) 19˝ rack mounting: To be inserted on pre-installed 19˝ sliding bars (2 height units required)
Weight	9.8 kg
Packing size	510 mm x 410 mm x 100 mm
Dimensions (w x h x d)	336 mm x 444 mm x 64 mm

Note: VSWR and attenuation values are measured when the remaining ports are terminated with 50-Ω loads.

Typical attenuation Tx1 ↔ Tx2 vs. Antenna VSWR



936.2425/d Subject to alteration.

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