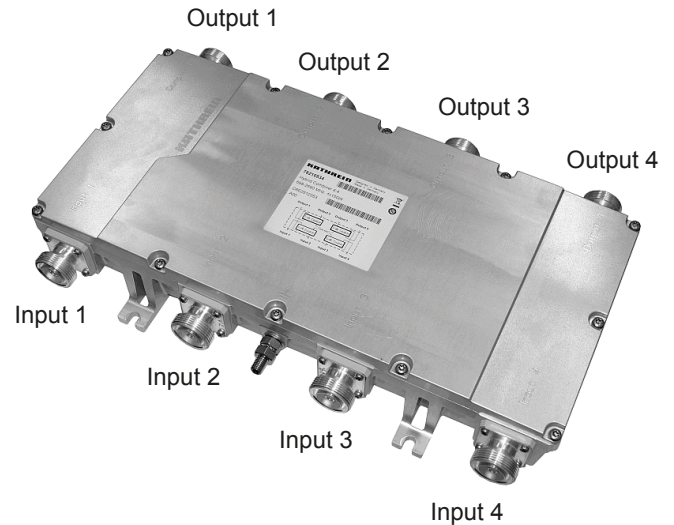


Hybrid Combiner 4:4

698 – 2690 MHz

4 x 150 W

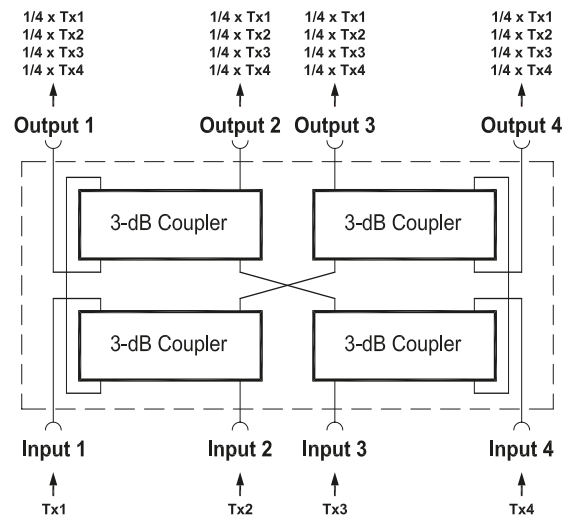
- Designed for the decoupled combining of 4 transmitter or receiver signals and distributing these signals equally onto 4 antenna outputs
- Suitable for indoor or outdoor applications
- DC/AISG bypass
- External DC stop available as an accessory



Technical Data

Type No.	78210534
Frequency range	698 - 2690 MHz
Insertion loss Input 1...4 ↔ Output 1...4	0.35 ± 0.15 dB
Power distribution loss (excluding insertion loss) Input 1...4 ↔ Output 1...4	6 ± 0.75 dB
	Typically 6.3 dB
Isolation Input 1...4 ↔ Input 1...4	> 20 dB*
Output 1...4 ↔ Output 1...4	> 20 dB*
VSWR (all ports)	< 1.22 (698 - 2170 MHz) < 1.4, typ. 1.2 (2170 - 2690 MHz)
Impedance	50 Ω
Input power	< 150 W at each input port
Intermodulation products	< -160 dBc (3 rd order; with 2 x 20 W)
Temperature range	-40 ... +60 °C
Connectors	7-16 female
Application	Indoor or Outdoor (IP 66)
DC/AISG transparency	Bypass (max. 2500 mA) between Input 1 ↔ Output 4 / Input 2 ↔ Output 2 / Input 3 ↔ Output 3 / Input 4 ↔ Output 1 External DC stop available as an accessory
Mounting	Wall mounting: With 4 screws (max. 8 mm diameter) Mast mounting: With mounting kit
Weight	4.5 kg
Packing size	453 x 125 x 273 mm
Dimensions (w x h x d)	375.9 x 65 x 224.2 mm (with connectors and mounting feet)

* Valid if all ports are terminated with 50-Ohm loads



Note:

The use of fewer than 4 inputs or outputs is possible. Any unused input ports have to be terminated with low-power 50-Ohm loads (e.g. Kathrein type 784 10367), unused output ports have to be terminated with high-power 50-Ohm loads (e.g. Kathrein low-intermodulation type 78210474).

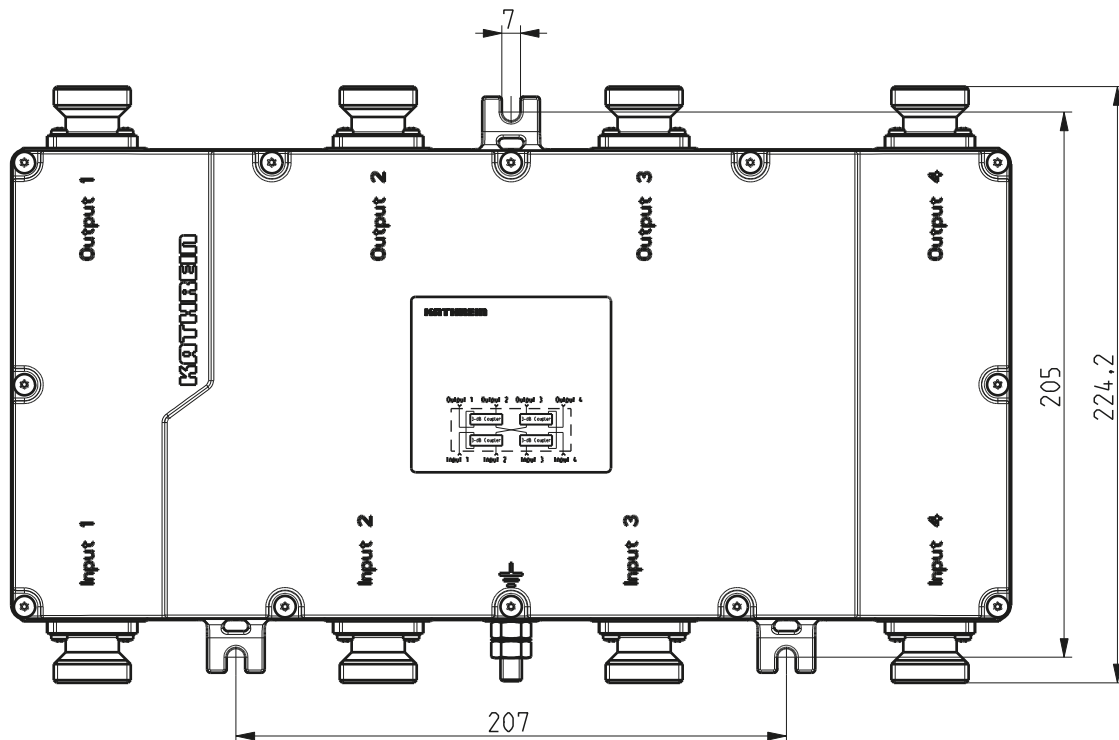
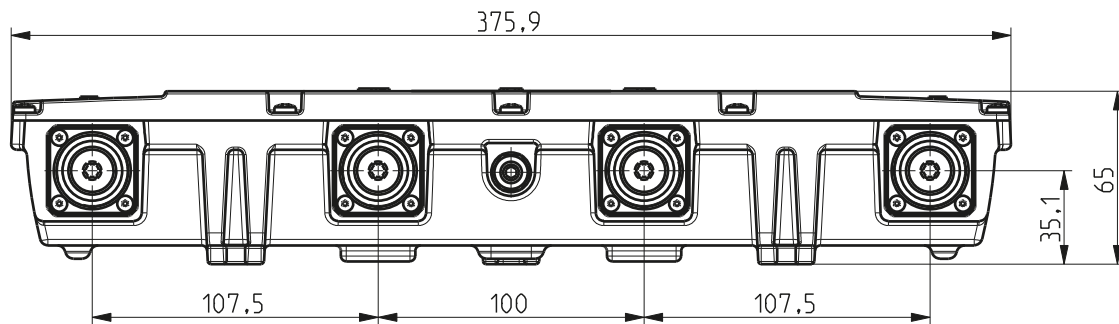
Hybrid Combiner 4:4

698 – 2690 MHz

4 x 150 W

Accessories (order separately)

Type No.	Description
78210850	DC stop
78210474	50-Ohm load (80 W)
78410367	50-Ohm load (1.5 W)
78210535	Mast mounting kit



Please Note:

As a result of more stringent legal regulations and judgements regarding product liability, we are obliged to point out certain risks that may arise when products are used under extraordinary operating conditions.

Extraordinary operating conditions, such as heavy icing or exceptional dynamic stress (e.g. strain caused by oscillating support structures), may result in the breakage of a mast mounted device or even cause it to fall to the ground.

These facts must be considered during the site planning process.

The Hybrid Combiner is designed to operate under the environmental conditions as described in ETS 300 019-1-4 class 4.1 E and have passed environmental tests as recommended in ETS 300 019-2-4.

The installation team must be properly qualified and also be familiar with the relevant national safety regulations.

The details given in our data sheets have to be followed carefully when installing the combiner and accessories.

The limits for the coupling torque of RF connectors, recommended by the connector manufacturers must be obeyed.

Any previous datasheet issues have now become invalid.

