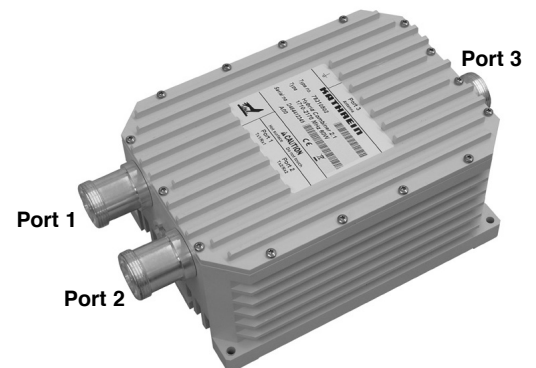


Hybrid Combiner 2:1

1710 – 2170 MHz

2 x 60 W

- Designed for the decoupled combining of 2 transmitter or receiver signals onto one common antenna
- The frequency spacing between transmitter signals can be as small as required
- **Excellent intermodulation performance**
- Suitable for indoor or outdoor applications
- Wall or mast mounting
- DC by-pass between all ports
- External DC stop available as an accessory



Technical Data

Type No.	782 10502
Frequency range	1710 – 2170 MHz
Attenuation	
Port 1 ↔ Port 3	3.1 ± 0.5 dB
Port 2 ↔ Port 3	3.1 ± 0.5 dB
Port 1 ↔ Port 2	> 22 dB*
VSWR (all ports)	< 1.25
Impedance	50 Ω
Input power	
Port 1	< 60 W
Port 2	< 60 W
Intermodulation products	< -160 dBc (3 rd order; with 2 x 20 W)
Temperature range	-40 ... +55 °C
Connectors	7-16 female (long neck)
Application	Indoor <i>or</i> outdoor (IP 66)
DC/AISG transparency	By-pass between all ports (max. 2500 mA) AISG attenuation: 3 dB with external DC stop (see configuration examples) / 6 dB without external DC stop
Mounting	Wall mounting: With 4 screws (max. 6.5 mm diameter) Mast mounting: With additional clamp set
Weight	3.7 kg
Packing size	377 x 232 x 189 mm
Dimensions (w x h x d)	143.6 x 199 x 97.5 mm (without connectors)

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

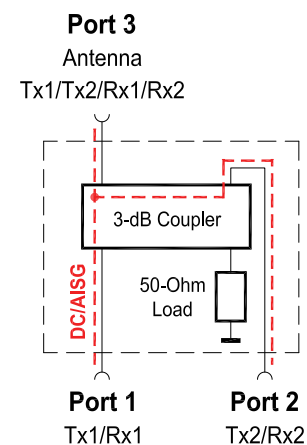
Note:

The input power rating of 60 W per port is specified at an ambient temperature of +55 °C with the combiner mounted horizontally, without additional cooling, and while respecting the safety standard EN IEC 60950 (max. surface temperature +90 °C).

If mounted vertically and/or used at a lower ambient temperature, then a higher input power in accordance with the following table is possible:

Max. input power per port

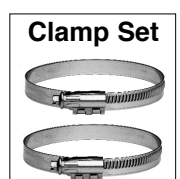
	Mounted horizontally	Mounted vertically
Max. ambient temperature		
+55 °C	60 W	70 W
+40 °C	70 W	80 W
+25 °C	75 W	85 W



Accessories (order separately)

Type No.	Clamp set suitable for mast diameter of
734 360	34 – 60 mm
734 361	60 – 80 mm
734 362	80 – 100 mm
734 363	100 – 120 mm
734 364	120 – 140 mm
734 365	45 – 125 mm
*131 1847	50 – 145 mm

*U.S. Customers order 131 1847



Type No.	Description
793 301	DC stop



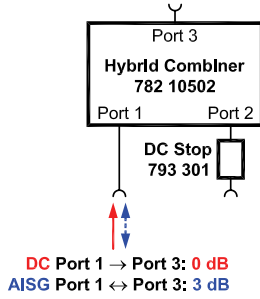
936.3197/b Subject to alteration.

Hybrid Combiner 2:1

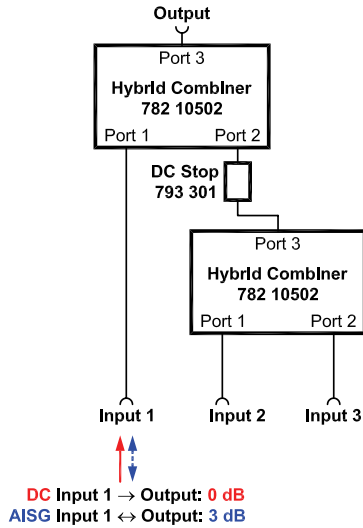
1710 – 2170 MHz

2 x 60 W

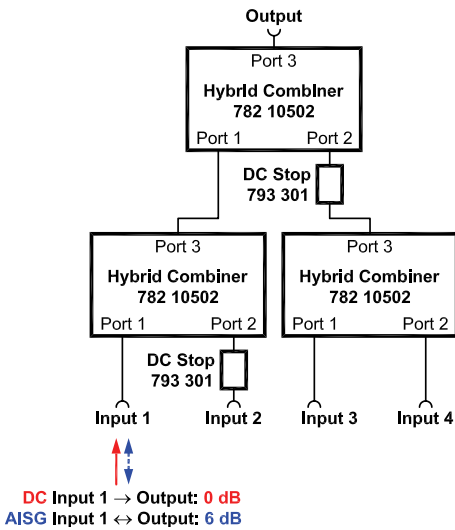
Configuration Example: Hybrid Combiner 2:1 (DC/AISG transparency)



Configuration Example: Hybrid Combiner 3:1 (DC/AISG transparency)

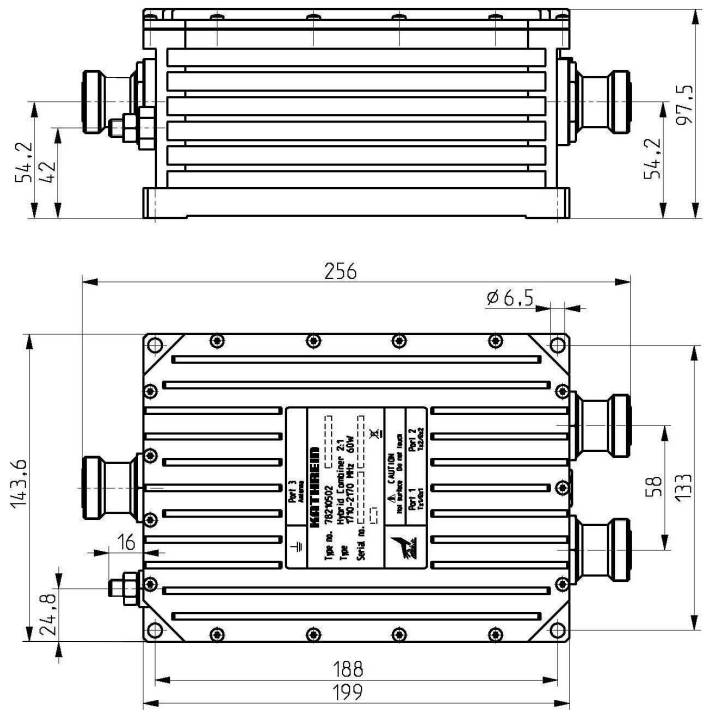
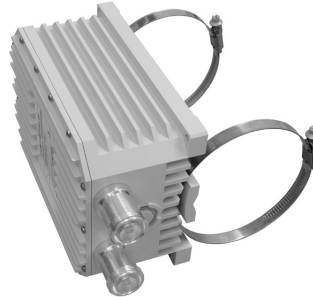


Configuration Example: Hybrid Combiner 4:1 (DC/AISG transparency)



Mast mounting with Kathrein Clamp set 734 360 ... 734 365

- ① Clamps inserted into slots at rear side of the Hybrid Combiner
- ② Side view of a mast mounted Hybrid Combiner



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.

