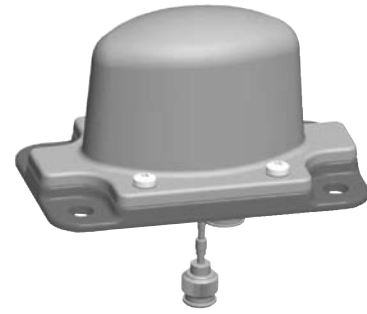


The Kathrein 870 10003 is a multiband/GPS antenna designed for on trains, buses, and other commercial vehicles in wireless communications systems. These antennas are supplied with an aluminum mounting flange for attachment to a conductive surface. The radiating element is copper and brass and is protected by a gray fiberglass radome. The antenna can be operated in all frequency ranges simultaneously. It is DC grounded to protect against lightning and high-tension lines. All fasteners are stainless steel. The antenna fulfills the requirements according to EN 50155.



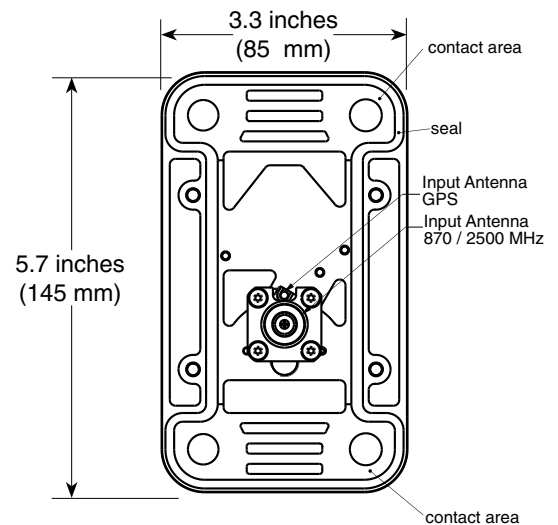
Specifications:	Multiband Antenna
Frequency range	806–2700 MHz
Gain	0 dB (re. to the quarter-wave antenna)
Impedance	50 ohms
VSWR	806–870 MHz <2.0:1 870–2550 MHz <1.5:1 2550–2700 MHz <2.0:1
Polarization	Vertical
Maximum input power	100 watts (at 50° C)
Connector	N female

Specifications:	GPS Antenna
Frequency range	1575.42 ± 1 MHz
Gain	2 dB (re. to the circularly polarized isotropic antenna)
Impedance	50 ohms
VSWR	<1.5:1
Polarization	Right hand circular
Maximum input power	100 watts (at 50° C)
Connector	RG 316/U cable (225 mm) with TNC male connector

General specifications:	
Weight	1.1 lb (0.5 kg)
Dimensions	5.7 x 3.3 inches (145 x 85 mm)
Height	3.2 inches (81 mm)
Shipping dimensions	6 x 4.9 x 3.6 inches (152 x 125 x 91 mm)
Mounting	Mounts on a conductive surface with a minimum size of 19.7 x 19.7 inches (500 x 500 mm) by cap nut only on 4 existing M10 studs. Requires 1.3 inch (33 mm) hole for the connector.

Order Information:	
Model	Description
870 10003	Mobile antenna with N female connector

Mounting flange:

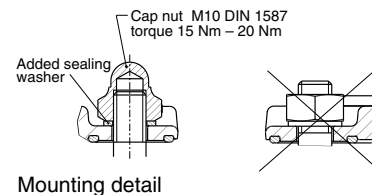


Mounting hole for the connector: 33 mm (max. 35 mm)

Note: Mounting surface must be free from paint for electrical contact.

Evenness of opposite surface 0.2 mm.

Use a cap nut plus the enclosed sealing washer.



Accessories: Low noise amplifier GPS 860 10069 (please order separately).

Warning: If the antenna is operated without the pre-amplifier type no. 860 10069, please note the following points:

Due to the fact that the inner conductor of the GPS antenna is DC grounded, the input of the GPS receiver is loaded with a DC short circuit. If the GPS receiver provides a remote DC power supply, this could damage the GPS receiver.

At the input of the GPS antenna a level of -25 dB below the signal applied at the input of the antenna multi-band appears. Depending on the level of the signal applied at the input of the antenna multi-band, the GPS receiver may be overloaded or damaged.



All specifications are subject to change without notice. The latest specifications are available at www.kathrein-scala.com.