

metraTec® hfMux-4 HF-Multiplexer

The metraTec hfMux-4 is an RFID multiplexer for HF systems operating at 13.56 MHz with a maximum RF power of 2 W (in the -MP version) or 4 W (in the -HP version). It allows connecting up to four antennas to a single RFID reader. This reduces setup complexity and cost significantly in cases in which multiple reading locations are needed as only one reader is required which has to be controlled.

The device operates with different readers and antennas of all manufacturers. Due to its optically isolated 24 V DC inputs it can also be operated directly out of a PLC. The LEDs indicating the active antenna facilitate installation. Versions with 8 and 16 ports are also available.

Applications

- Sequential reading of multiple locations (e.g. shelves in libraries)
- Location tracking using antenna arrays
- Reading of tags independent of polarisation (3D reading)

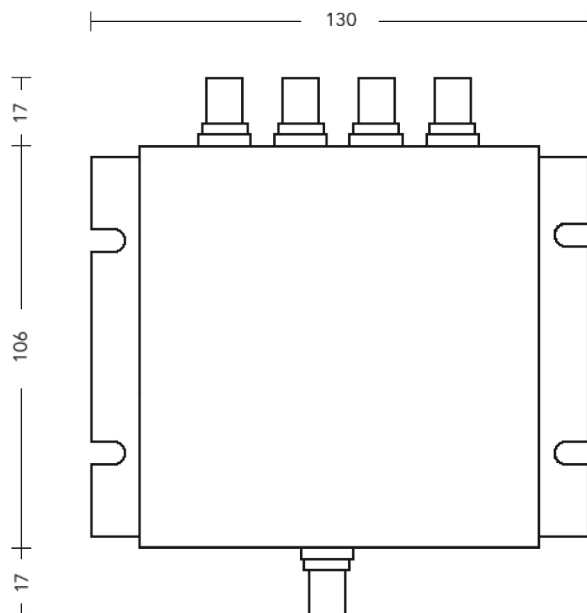
Other RFID Hardware by metraTec

metraTec offers a comprehensive range of RFID products that allow setting up a complete RFID system with components that work together seamlessly. On the antenna side, the hfMux-4 can be combined with e.g. the antennas of the PCB- and Lambda series or with custom design antennas. On the reader side it can be connected to a QuasarMX in case Ethernet connectivity is desired or to the QuasarLR in case longer read ranges are desired.



Technical Specification

Working Principle	1 on 4 HF Multiplexer with reflective switches
Operating Frequency	13.56 MHz
max. RF Power	-MP Version: 2W -HP Version: 4W
Antenna Connector	BNC (others on request)
Operating Voltage	24V DC
Current Consumption	60 mA typ.
Insertion Loss, typ.	0.45 dB
Control	optically isolated 24V DC inputs
Switching Time	4 μ s typ.
Operating Temperature	-40° C to +85° C
Housing, Dimensions	Aluminium, 130 x 106 x 55 mm
Protection	IP40 (higher on request)
Other Features	Status LEDs, hot-switchable



At a Glance

- Easy installation and control
- Compatible with all HF readers with up to 2 resp. 4W RF power
- Low current consumption

About metraTec

metraTec develops, manufactures and sells RFID hardware in the product segments „Finished Products“, „Automation“ and „Embedded RFID“. It serves a variety of industries, both with standard products as well as custom solutions. Our customers are mainly system integrators, research institutes as well as OEM customers.

Contact

metraTec GmbH
Niels-Bohr-Str. 5
39106 Magdeburg, Germany

Tel.: +49 (0)391 251906-00
Fax: +49 (0)391 251906-01
Email: sales@metratec.com
Web: www.metratec.com