



metraTec® hyperMux-4 RFID Multiplexer

The metraTec hyperMux-4 is an RFID multiplexer for UHF systems with an operating frequency of 868 MHz and 915 MHz, as well as higher frequencies such as 2.4 GHz. It allows connecting up to four antennas to a single antenna port. This reduces system complexity and setup costs in cases where many antennas are needed and also lowers hardware system costs as the number of readers needed decreases.

The device works irrespective of the manufacturer of the antennas and readers used. Furthermore, the multiplexer has a very small size and a minimal power consumption which enables mobile operation. Due to the broad frequency range covered by the hyperMux-4 it can be used in UHF systems worldwide. As of today it is already compatible with future RFID systems working at 2.4 GHz making it truly future proof.

Application Suggestions

- Sequential reading of several areas (e.g. SmartShelves)
- Location tracking with antenna arrays

Further RFID Components by metraTec

metraTec offers a comprehensive set of RFID products that enables its customers to set up RFID systems whose components work together seamlessly. This multiplexer can be connected e.g. with up to four antennas of our Delta series as well as custom antennas or antennas by any other manufacturer.

Technical Specifications

Operating Principle	1 on 4 UHF Multiplexer with reflective switches
System Impedance	50 Ohm
Operating Frequency	868 MHz, 915 MHz, 2.4 GHz
max. RF Input Power	8 W
Connections	SMA (other, e.g. R-TNC on request)
Power Supply	12 - 24 V DC
Current Consumption	20 mA typical
Insertion loss, typ.	~900 MHz: 0.9 dB / 2.4 GHz: 3.2 dB
Cross talk, typ.	~900 MHz: 28 dB / 2.4 GHz: 20 dB
Features	Hot Switchable, Failsafe
Control Inputs (S1, S2)	TTL
Switching speed	1 μ s typical
Temperature Range	-40 °C to +85 °C (-40 °F to +185 °F)
Housing, dimensions	Aluminium, 112 x 62 x 30 mm (4.4" x 2.5" x 1.2 ")
Ingress Protection	IP 40 (higher on request)
Conformity	CE, including EN 60950-1, ETSI 301 489-3

At a Glance

- Simple set up and control
- Compatible with all UHF Readers
- Low power consumption
- Small size

About metraTec

metraTec is a producer of a comprehensive line of RFID products as well as similar electronic equipment. As such, we are able to deliver the entire hardware needed for your RFID projects from one single source - filling the gap between the tag and your software infrastructure.

Contact

metraTec GmbH
 Werner-Heisenberg- Str. 1
 39106 Magdeburg
 Germany

Tel.: +49 (0)391 25 19 06 - 00

Fax: +49 (0)391 25 19 06 - 01

Email: sales@metratec.com

Web: www.metratec.com

