

On Metal RTI Transponder

EPCglobal Class 1 Gen2 UHF transponder designed for returnable transport item (RTI) applications

- ▶ **Efficient** – ultra high frequency (UHF) allows for accurate and efficient simultaneous reads of multiple items in one pass
- ▶ **Adept and Reliable** – outstanding performance on metal surfaces widely used in RTI applications with liquid contents
- ▶ **Broadband** – can be used worldwide from 860 to 960 MHz
- ▶ **Robust** – designed to withstand the harshest of physical environments
- ▶ **Curved** – innovative housing offers better adherence to cylindrical RTI's



SECURE logistics.

HID Global's On Metal RTI Transponder features a passive contactless transponder designed to communicate with a reader via radio frequency identification (RFID) technology. Developed specifically for metallic returnable transport items, the On Metal RTI Transponder includes a unique electronic design optimized to facilitate reliable inventory tracking amidst a dense field of objects. Even when the items are filled with liquids the On Metal RTI Transponder allows unprecedented reading performance.

The durable ABS plastic housing of the transponder is slightly curved along one axis to improve the fitting on rounded RTI's such as beer kegs, chemical drums, or any durable metallic cylindrical product that needs to be serviced, tracked or returned. Surrounded with a metal ring, the On Metal RTI Transponder is designed to be welded on metal objects providing secure attachment, but can also be strongly fixed on any surface via other methods, offering flexibility in the installation.

The robustness of the transponder makes it the ideal solution to address the needs of many applications where RTI's must withstand harsh temperature and liquid environmental conditions such as through washing and sterilization processes.

The relatively small size of the transponder makes it easily mounted on a wide variety of containers for many applications. Given the size, the HID On Metal RTI Transponder guarantees the best performance to size ratio with operating distances up to 7 meters, typical for a standard UHF transponder under no adverse conditions. The transponder features a broadband antenna operating from 860 to 960 MHz, allowing worldwide use.

The On Metal RTI Transponder for returnable transport items allows reads of multiple items in one pass giving full visibility not only in the warehouse, but also during transportation and on customer sites.

On Metal RTI Transponder

Base Model Number	6A3980
Length	78 ± 1 mm
Width	27 ± 1 mm
Thickness	14 ± 0.5 mm
Radius of Curvature	450 mm
Length with Metal Ring	88 ± 1 mm
Width with Metal Ring	37 ± 1 mm
Thickness with Metal Ring	14 ± 1 mm
Weight	15 g
Housing Material	ABS
Vibration Test	IEC 68.2.6 (10g, 10...2000 Hz, 3 axis, 2.5 h)
Humidity	+70°C, 80% (100h)
Ring Material	Stainless steel
Housing Color	Pantone Blue 287 C
Chip Type	ISO 18006-C, EPCglobal Class 1 Gen2 Compliant
Operating Frequency	Europe: 865.6-867.6 MHz 2 W ERP USA: 902-928 MHz 4 W EIRP Japan: 952-956 MHz 4 W EIRP
Storage Temperature	-40°C to +70°C (1 x 1000h)
Operating Temperature	-30°C to +70°C
Thermal Shock	-40° C to + 85° C (100 x 5 min with transition time of 20 sec)
Water Immersion IP67	20° C, 30min, 1m
Salt Mist	20° C, 100h
Petroleum	20° C, 100h
Mineral and Vegetable Oils	20° C, 100h
Shock test	IEC 62262 IK08

© 2010 HID Global. All rights reserved. HID, and the HID logo are trademarks or registered trademarks of HID Global in the U.S. and/or other countries. All other trademarks, service marks, and product or service names are trademarks or registered trademarks of their respective owners. Rev. 05/2010

mkt_om_rti_trans_ds_en



SECURE logistics.

hidglobal.com

Corporate North America
15370 Barranca Pkwy
Irvine, CA 92618
U.S.A.
Tel: 1 800 237 7769
Tel: +1 949 732 2000
Fax: +1 949 732 2360

Switzerland SA
Rte Pra-Charbon 27
CH-1614 Granges
Switzerland
Tel: +41 21 908 01 00
Fax: +41 21 908 03 01

Asia Pacific
19/F 625 King's Road
North Point
Island East
Hong Kong
Tel: +852 3160 9800
Fax: +852 3160 4809

Latin America
Circunvalación Ote. #201 B
Despacho 2
Col. Jardines del Moral
Leon 37160, Gto.
Mexico
Tel: +52 477 779 1492
Fax: +52 477 779 1493

Europe, Middle East & Africa
Haverhill Business Park
Phoenix Road
Haverhill, Suffolk
CB9 7AE
England
Tel: +44 1440 714 850
Fax: +44 1440 714 840