



## RFID castor

### for management and monitoring of equipment and products

Manner has developed RFID castors to be used in several different solutions in various branches of business. The RFID castors are intelligent and efficient – they save costs and increase the usability of equipment and also enable to track final products in the stock or from the market.

Manner has introduced a 100 mm and 125 mm RFID-enabled wheel for trolleys and roll containers, including Tango castors. The RFID wheel is identical in dimensions and properties to the standard wheels; therefore, it can be directly mounted to existing equipment.

#### Benefits:

- Cost savings
- Short-term ROI
- Reliable and flexible solution
- Accurate reading
- Hidden and protected tags
- Easy fit
- A wide range of applications



#### The intelligent and efficient RFID wheel reduces costs and improves the availability of the equipment

The combination of RFID-enabled wheels, RFID reader and operating software makes managing equipment, roll containers and products more cost-effective. For example, better uptime for product roll containers in a logistic centre, and improving the efficiency of the storage space. The RFID-enabled wheels can be used in wide range of applications, including health-care and industrial laundry. Installation is done at a relatively low cost, and the payback time is short.



## What is RFID?

RFID (Radio Frequency Identification) refers to a wireless data transfer system, in which mobile or fixed readers are used to recognise an RFID tag via radio frequency. In Manner RFID wheel solution, a passive RFID UHF (Ultra High Frequency) tag is embedded in a standard Manner wheel.

## A durable, reliable solution

The RFID-enabled wheels can be fitted into both plastic and metal trolleys, carts, and medical equipment, and still provide equally good readability for all of them. A tag that is embedded in the wheel ensures excellent readability even when the trolleys are being folded and stacked. The tag can be fitted into existing equipment by simply replacing one of the wheels. Thanks to encapsulation into the wheels, the solution functions perfectly in a damp environment and is protected from any mechanical impacts. The RFID tag can be read at a distance of over 5 meters, and it utilizes the latest information technology.

Thanks to encapsulation into the wheels, there is no need to fit a tag into roll containers or other wheeled equipment. It remains intact also in situations where the roll containers are subjected to shocks.

## Designed for versatility

By utilizing a tracking system to monitor the movements, RFID-enabled wheels can be used in a multitude of applications, such as logistic centres, retail businesses, postal services, dairy industries, and hospitals. For example, plant and flower wholesalers can link each product to a database by means of a special roll container. The location of their products can be monitored when the roll containers containing the products pass through fixed control points; for instance, in ports of loading or in warehouse areas. RFID wheels can also be used to locate carts in a retail shop or medical beds in a hospital.



## Technical Tag Specifications:

RFID-UHF technology
Latest chip sets with UID (Unique Identification Number)
Read distance over 5 m
EPC class 1 Gen2 ISO-18000-6C compliant
Global operation from 860-960 MHz



Oy Mannerin Konepaja Ab, P.O.Box 3, 10901 Hanko, Finland  
Tel. +358 19 222 001, Fax +358 19 248 2000  
E-mail: manner@manner.fi, Internet: www.manner.fi

