



## RFID Labels for Tracking Metal Goods

### Description

The PowerM label is an RFID label designed specifically to reliably track metal assets at distances of up to 40 meters. PowerM is ideal for tracking the following metal goods, among others:

- Steel slabs and coils
- Automotive parts
- Aerospace products
- IT infrastructure
- Metal containers

### Superb reliability, low price

The PowerM label provides superior performance due to PowerID's thin and flexible, environment-friendly battery on board the label. This power source obviates the need to harvest energy from the RF reader, which causes passive RFID labels to provide poor performance when attached to metals.

PowerM is the ideal solution for companies searching for a way to affordably track their metal goods. For the first time, these companies have an RFID option that combines high read ranges with high reliability and affordability.

Features	Benefits
Gen. 2 compliance	Supported by Gen. 2 infrastructure and off-the-shelf hardware and software
Integrated power source	Eliminating the need to collect energy from the reader leads to improved backscattering and near 100% read reliability
UHF RFID	Operates in 902-928 MHz and 865-868 MHz, preferred by logistics operators
Environment-friendly battery	Power of active RFID without the chemicals or heavy metals of an active tag battery
Printable battery	Combining the affordability of a thin and flexible label with the performance of an active tag
Designed for challenging environments	Ideal for metal items such as slabs, coils, IT infrastructure, roll containers, etc.

# PowerM Specifications

<b>Label name</b>	PowerM-U (FCC) and PowerM-E (ETSI)
<b>Application</b>	Tracking goods made of or containing metals
<b>Dimensions</b>	PowerM-U601: 170 x 80 x 3.2 mm PowerM-U602: 80 x 65 x 3.2 mm PowerM-E610: 170 x 80 x 3.2 mm
<b>Operating frequency</b>	PowerM-U: 902-928 MHz and PowerM-E: 865-868 MHz
<b>Protocol</b>	EPCglobal Class 1, Gen 2 ISO 18000-6C
<b>Memory</b>	96-bit EPC memory 720-bit on-chip user memory 64-bit tag unique identifier
<b>Power source</b>	Integrated proprietary disposable battery
<b>Antenna</b>	Planar printed antenna
<b>Life expectancy</b>	2.5 years (at room temperature)
<b>Environmental</b>	Operating temperature: -20° C to +60° C Humidity: 5%-95% non-condensing



Strada delle Fratte 3M/3  
Z.I. 06132 San Sisto (PG)  
Tel. 075.5270966 - Fax 075.5271999  
[www.italcode.it](http://www.italcode.it) - [italcode@italcode.it](mailto:italcode@italcode.it)