



TRAKAID On-Metal RFID Asset Tag

Trakaid offers a unique modular family of RFID (Radio Frequency Identification) tags suitable for use on metal and specifically designed for industrial gas cylinders. The tags custom design features tremendous adaptability to meet application requirements for tracking and identification of assets. The tags casing is modularized so that the curve is adjusted to meet specific requirements, making it easier to mount on flat or non-linear surfaces such as gas cylinders, drums, pipes and many other assets which require a permanent tag solution. The all-weather rugged tag, which reads reliably over and over, is resistant to extremes in temperature, moisture, debris, vibration, salt and other solvents. The design of TRAKAID tags compensates for the tendency of metal to alter resonant tag antenna properties, potentially detuning the antenna.

Product description:

The Trakaid all-weather curved tag is an Ultra High Frequency (860 MHz- 960 MHz) EPC Class 1 Gen 2 passive tag optimized for identification of metal objects with read range customizable from 15 cm to 3 m. It can be attached to the item surface with an easy-peel industrial-strength adhesive or be permanently bonded to ensure it remains attached even in the harshest environments for years. The tag is powered by a powerful chip and antenna design that provides accurate reads from long distances.

Mechanical Characteristics	Description
Operational Temperature	-40 deg C to + 70 deg C
Casing	ABS impact resistant
Degree of Protection	IP 68; Compliance with IEC standards for Humidity, Vibration, Shock, Dust
Colors	Blue or custom color
Mounting System	epoxy/acrylic bonding
Back Curve Radius	Modularized to fit the surface e.g cylinder with diameter 236 mm, 180 mm, 140 mm, 110 mm

Functional Characteristics	Description
Operating Frequency	UHF 860MHz to 960MHz
RF Air Protocol	EPC Class 1 Gen 2, ISO 18 000-6C (Passive Tag)
Functionality	Read / Write
Memory – Expected Read / Write Cycles	10 years or up to 10,000 write cycles
Data Retention	Life of Product
Read Rate	Up to 400 per second, but application dependant
Read Distance	Up to 3 m (under specified conditions)
Write Distance	Up to 60 cm (under specified conditions)
Polarization	Linear

Tag Size	Memory
49 mm x 23mm x 8 mm	64 bit unique \ 128 bit EPC
56 mm x 23mm x 8 mm	96 bit unique \ 256 bit EPC + 512 bit user memory