

Data Trak II



Functional Specifications

| | |
|---------------------------------------|-----------------------------------------------|
| RF air protocol | EPC Class 1 Gen 2; ISO18000-6C |
| Operating frequency | UHF 902-928 MHz (US); 866-868 MHz (EU) |
| IC type | Impinj M4E ¹ |
| Memory configuration | 496-EPC bits; 128-bit user memory; 48-bit TID |
| Functionality | Read / write |
| Memory – expected read / write cycles | 100,000 cycles at 77°F (25°C) |
| Data retention | Up to 50 years ² |
| Read rate | 400 tags per second for 96-EPC bit number |
| Warranty (limited) | 1 year |

Performance Characteristics

| | |
|--------------------------------------------|-----------------------|
| Read range on-metal (2W ERP) ³ | Up to 14.8 ft (4.5 m) |
| Read range off-metal (2W ERP) ³ | Up to 8.2 ft (2.5 m) |
| Polarization | Linear |

Physical Specifications

| | |
|-----------------|------------------------------------------------------------------------|
| Material | Industry Grade Polymer |
| Mounting system | High performance adhesive; 0.1 in (2.6mm) tethering hole |
| Color | Cool Gray |
| Optional label | Standard or custom data in 1D or 2D matrix and human readable EPC code |

Environmental and Industry Compliance

| | |
|------|-------------------------|
| FSTC | FSTC compliant |
| RoHS | EU Directive 2002/95/EC |



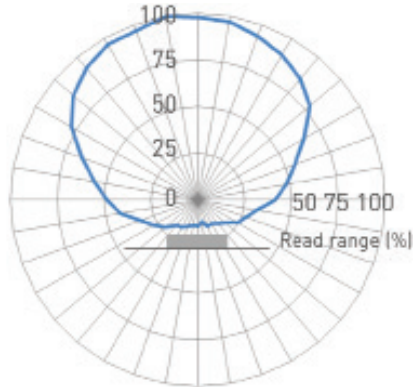
¹This product utilizes an Impinj M4E chip; each tag will have the exact same EPC number and a unique TID number. Xerafy will verify the Read/Write function of each chip memory before shipment.

²The chip data retention is based on chip operating under general environment conditions.

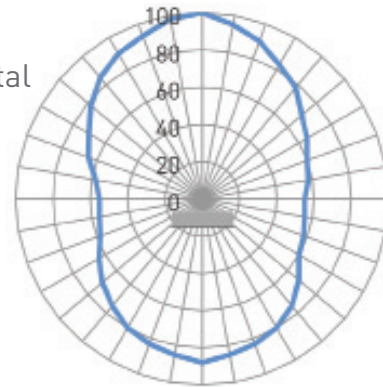
³Actual read range may vary based upon use case and antenna power.

Radiation Pattern

On-metal



Off-metal



Operational and Environmental Specifications

Operational temperature

| | |
|----------------------------------------|-----------------------------------------|
| Cold | -40°F (-40°C) |
| Dry heat (Long term, days/weeks/years) | +185°F (+85°C) |
| Thermal shock | -40°F to 185°F (-40°C to +85°C); cycled |

Application temperature

| | |
|--------------------------------------|----------------|
| Cold | -40°F (-40°C) |
| Dry heat (Short term, minutes/hours) | +185°F (+85°C) |

Humidity

| | |
|----------------------|-----------------------|
| Operational humidity | 5%-95% non-condensing |
| Storage humidity | 5%-95% non-condensing |

Shock (drop)

3 ft (1 m) to concrete/granite up to 200 cycles

Vibration

MIL-STD-810F

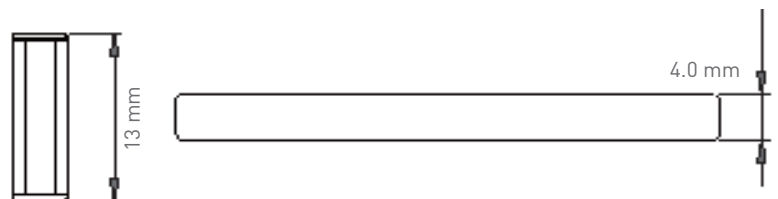
Compression strength

14.5 psi (100 kPa)

IP classification

IP54

Product Dimensions and Weight



Dimensions (mm)

38 x 13 x 4.0

tolerance

+/- 0.35

Dimensions (in)

1.50 x 0.51 x 0.16

tolerance

+/- 0.014

Weight

0.08 oz (2.3 g)

Order information

X0330-US011-M4

Data Trak II US

X0330-EU011-M4

Data Trak II EU