PRODUCT DATASHEET

Confidex Pino™

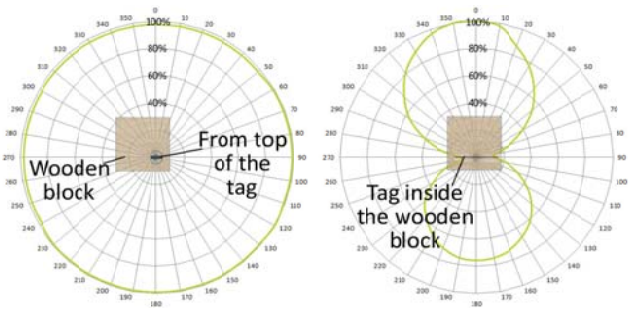
Special label for wooden pallet identification with proven performance inside wood.

ELECTRICAL SPECIFICATION

Device type
Class 1 Generation 2 passive UHF RFID transponder
Air interface protocol
EPCGlobal Class1 Gen2 ISO 18000-6C
Operational frequency
Global 860-960MHz
IC type
Impinj Monza 4QT™
Impinj Monza 4E™ (upon special request)
Memory configuration
With Monza 4QT: EPC 128 bit; User 512 bit; TID 96 bit
With Monza 4E: EPC 496 bit; User 128 bit; TID 96 bit
Read range (2W ERP)*
EU inside dry wood up to 8 m / 26 ft
US inside dry wood up to 6,5 m / 21 ft
Totally wet wood will typically cause a performance decrease of 40-50%
Applicable surface materials
Wood.

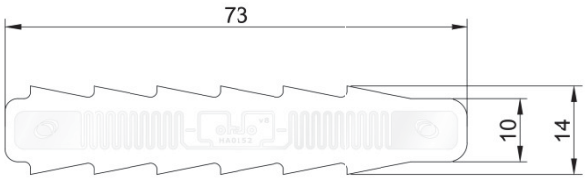
* Read ranges are theoretical values that are calculated for non-reflective environment, in where antennas with optimum directivity are used with maximum allowed operating power according to ETSI EN 302 208 (2W ERP). EU = 865 - 868 MHz, US = 902 - 928 MHz. Different type of wood may have an effect on performance.

RADIATION PATTERNS



MECHANICAL SPECIFICATION

Tag materials
White PET
Weight
0,6 g
Delivery format
Single
Amount in box
500 pcs
Tag dimensions
73 x 14 x 0,3 mm / 2.87 x 0.55 x 0.012 in



ENVIRONMENTAL RESISTANCE

Operating temperature
-35°C to +60°C / -31°F to +140°F
Ambient temperature
-35°C to +60°C /-31°F to +140°F
Water resistance
Good, tested 5 hours in 1m deep water (IP68)
Chemical resistance
No physical or performance changes in:
- 200h Salt water (salinity 10%) exposure
- 168h Motor oil exposure
- 168h Sulfuric acid (10%, pH 2) exposure
- 24h NaOH (10%, pH 13) exposure
- 30min Acetone exposure
Storage condition
1 year in +20°C / 50% RH (shelf life for adhesive)
Expected lifetime
Years in normal operating conditions

Values in the table are the best recommendations; resistance against environmental conditions depends on the combination of all influencing factors, exposure duration and chemical concentrations. Thus, product's final suitability for certain environmental conditions is recommended to be tested. Contact Confidex for more specific information.

PERSONALIZATION OPTIONS

Pre-encoding

- Customer specific encoding of EPC or user memory. Locking permanently or with password.

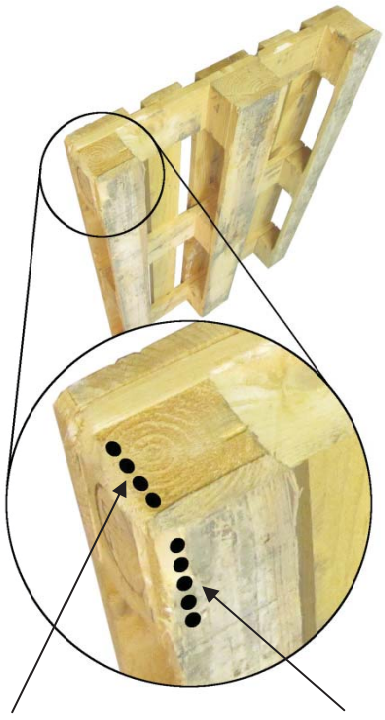
INSTALLATION INSTRUCTIONS

Tag polarization

There are several options how to install the tag on the pallet depending on the reader antenna location and tag inserting technique. Usually pallet is equipped either with one or two Confidex Pino™ tags.

Tag should be installed inside the corner block. The centre block is not recommended since truck's metal forks may block the RFID signal.

- Vertical installation offers best orientation towards RFID antennas in various configurations.
- Horizontal installation of the tag gives the best performance in case where reader antennas are located above the pallet.



Optimum drilling locatons at the side of the corner block (horizontal installation)

Optimum drilling locations at the bottom of corner block (vertical installation)

Installation procedure:

1. Drill a hole of 13mm diameter and 100mm depth to a location described above
2. Push the tag into the block so that it is totally inside the block using Pino installation tool

3. Hole can be covered with sealant if the use environment includes high moisture

ORDER INFORMATION

Product number: 3000392
Product name: Confidex Pino™ M4QT

For other versions, additional information and technical support contact Confidex Ltd.