User Manual for:

Y-Tag PT 100 1.0

Product code 020 1501 001

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Foreword

This User Manual is intended for users and installers of the Y-Tag PT 100 1.0. Read the User Manual thoroughly before proceeding to install or use the Y-Tag PT 100 1.0. This product is delivered exclusively to businesses and may only be installed and operated by installers who have been trained by Dyzle.

This User Manual makes reference to the Dyzle Hardware Installation Manual. This document provides information on installation and maintenance of the Y-Tag PT 100 1.0. The Dyzle Portal 2 User Manual describes how to use the online Portal. You can manage your settings and view the data that is submitted by the sensors and Y-Gates in the Portal. Contact your supplier's support department to obtain a copy of the latest version of the Manuals.

Table of Contents

General description of the Dyzle solution

The Y-Tag PT 100 1.0 integrates temperature measurements that are taken with a PT100 in the Dyzle solution. The solution consists of a personal dashboard (online Portal) and the necessary hardware. The hardware will take and send measurements to Dyzle in the form of data packages, which can contain information such as:

- temperature measurements;
- door monitoring (door open / closed);
- humidity (% RH);
- electricity consumption;
- location (GPS; only for a mobile location);
- CO_2.

The hardware consists of sensors (Y-Tags) and a base station (Y-Gate) that communicate wirelessly with one another. The components contain electronics that are powered by an adapter, the vehicle's battery, or a battery-pack. The components are NOT waterproof, unless specified otherwise, and must therefore be protected from water and other liquids. Other than the wiring and sensors, which are designed for high-temperature applications and are explicitly specified as such, the hardware itself should NOT be exposed to temperatures above 50°C.

Dyzle sensors can be used for measuring temperatures in cold rooms, freezers, refrigerators, refrigerated displays, and promotional displays. Both air- and product-temperature are measurable and are therefore distinguised from one another. Outfitting a delivery truck or van, which contain food or pharmaceutical products, with the hardware allows for continuous recording of position and / or temperature of the conditioned space.

The Dyzle solution is designed to address the needs of customers in the food, pharmaceutical / care and transport industries in terms of:

- Automated temperature registration (24/7);

- Notification service in the event of a temperature exceedance by email, premium SMS or IVR*;
- Automated HACCP / QA reports.

* For Interactive Voice Response (IVR): ask the support department about the possibilities.

General description of the Y-Tag PT 100 1.0

The Dyzle Y-Tag PT 100 1.0 integrates temperature measurements that are taken with a PT100 in the Dyzle solution. The PT 100 is connected to the Y-Tag PT 100 1.0 through a connection cable. The Y-Tag PT 100 1.0 takes a measurement every five minutes and transmits the temperature data to the Y-Gate through a wireless connection. The Y-Gate - the base station - collects the measurement data from the Y-Tag(s) and sends the data to the server.

Product specifications*

Product code	020 1501 001
Measuring range	-200°C to +200°C. Maximum range of the Y-Tag.
Resolution	± 0.14°C
Measurement interval	5 minutes
Memory	± 25 days (data backup when the connection to the Y-Gate is lost)
Connectivity to Y-Gate	WIFID, 2.4 GHz (coded)
Connectivity range	100 m (unobstructed)
Power supply	3.6 V DC (lithium battery)
Battery life (guaranteed)	1 year (room temperature)
Operating temperature	-25 °C to +50 °C
Water resistance	IP44 (splash-proof)
Accessories supplied	connecting cable
Accessories not supplied	PT100 sensor

* Refer to the separate product specifications overview for the comprehensive product features.
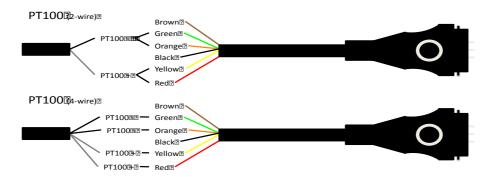
Safety

Installation of the Y-Tag PT 100 1.0 requires general knowledge of safe work practices, therefore may only be carried out by personnel holding the required operational Safety Certificate and should also have the necessary knowledge of the spaces, equipment and vehicles that will be measured for temperature as well as the location where the system is to be installed.

While installing please bear the following in mind: the connection cable may not rest against a hot pipe. Take the necessary precautions to protect the cable from wear and tear.

Placement and installation

Consult the Dyzle Hardware Installation Manual for the general installation instructions for Y-Tags at a stationary or mobile location. Also consult the wiring diagram below for the Y-Tag PT100 1.0.

Connect diagram - PT100

Remark: The measuring current runs through the +/- PT100 connection. The sense pins measure the voltage thus passing through the PT100. The 4-wire detection results in a separation between current and voltage, which allows the ohmmeter / electrical resistance meter to exclude the influence of cable resistance for a more accurate measurement result. If the optional cable resistance detection is not used, the + pins of the PT100 and sense must be linked to one another and the – pins of the PT100 and sense must be linked to one another.

Making the device operational and resetting it

A new Y-Tag must first be made operational:
- By pressing the reset button twice: first press and release, then press and hold until the LED lights up;
- When the Y-Tag has established a connection with the Y-Gate, the Y-Tag will flash every 3 seconds. This may take several minutes;
- If the Y-Tag fails to establish a connection, try to reset it.

You reset the Y-Tag by pressing the reset button once. The Y-Tag will now blink rapidly as it tries to establish a connection with the Y-Gate.

Maintenance and battery replacement

The exterior of the Y-Tag can be cleaned using a soft, damp cloth. Do not use any detergents. We recommend that you replace the battery annually. The battery may not be thrown out with household trash, but should be disposed of as hazardous (chemical) household waste. The battery should only be replaced by an authorised technician. Consult Part 4 of the Dyzle Hardware Installation Manual for instructions.

Warranty

Refer to Dyzle's General Terms and Conditions of Sale and Delivery for our warranty terms. Contact your supplier before returning the item in case of a warranty claim.

Dyzle | Proof you're right!

Declaration of conformity - FCC

This device complies with part 15 of the FCC Rules. The following conditions apply for use of this device: 1) This device may not cause any harmful interference and 2) this device must accept incoming interference, including interference that could possibly cause an undesired effect.

Declaration of conformity for the European Union

Dyzle herewith declares that this wireless device complies with the essential requirements and other relevant provisions of the R&TTE Directive.
Tests indicate that this product complies with the EMC Directive.

CE0560 ① FC ✓RoHS

Disposal

This product was manufactured using high-quality materials and components, which can be reused and recycled.

Batteries may not be thrown out with household trash. You are required by law to return used batteries to your dealer or to deposit them in the designated containers in accordance with the national or local stipulations, to guarantee environmentally compatible disposal.

This product may not be thrown out with household trash. The user is obliged to return the device to an accredited organisation for the disposal of discarded electrical and electronic equipment, to guarantee environmentally compatible disposal.