

User Manual for:

## Y-Tag Pulse

Product code 050 1007 001



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## Foreword

This User Manual is intended for users and installers of the Y-Tag Pulse. Read the User Manual thoroughly before proceeding to install or use the Y-Tag Pulse. 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. 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.

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## General description of the Dyzle solution

The Y-Tag Pulse is part of 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<sub>2</sub>.

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 distinguished 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 Pulse

The Dyzle Y-Tag Pulse is a wireless, splash-proof (IP44) pulse sensor. The Y-pulse is used to integrate water-, gas- and electricity meters in the Dyzle solution. The Y-Pulse can therefore be connected to the pulse output of the relevant water-, gas- and electricity meters. The Y-Tag Pulse takes a measurement every five minutes and sends the measurement data to the Y-Gate. The Y-Gate – the base station - collects measurement data from the Y-Tag(s) and sends the data to the server.

## Product specifications\*

Product code	050 1007 001
Pulse type	Voltage pulse: pulse duration > 2 msec, pulse voltage 1 to 10V Optocoupler: pulse duration > 2 msec, capacity < 1nF
Connectivity range	100 m (unobstructed)
Measurement interval	5 minutes
Memory	A maximum of 65,000 pulses (if the connection to the Y-Gate is lost)
Power supply	3.6 V DC (Battery pack)
Battery life	1 year (room temperature)
Ambient conditions	-25 °C to +50 °C
Water resistance	IP44 (splash-proof)

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

## Safety

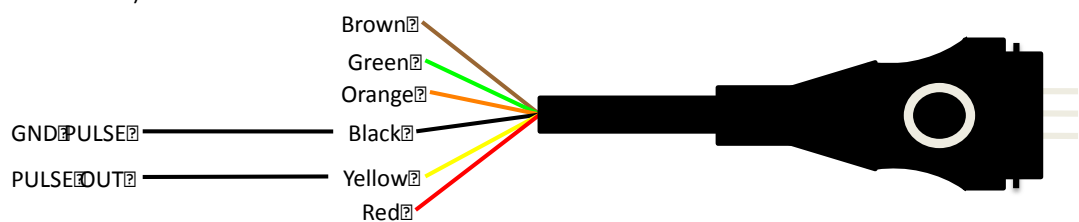
Installation of the Y-Tag Pulse requires general knowledge of safe work practices, therefore may only be carried out by personnel holding the required operational Safety Certificate, and should also have the necessary knowledge of the spaces, equipment and vehicles that will be measured for temperature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

## Placement and installation

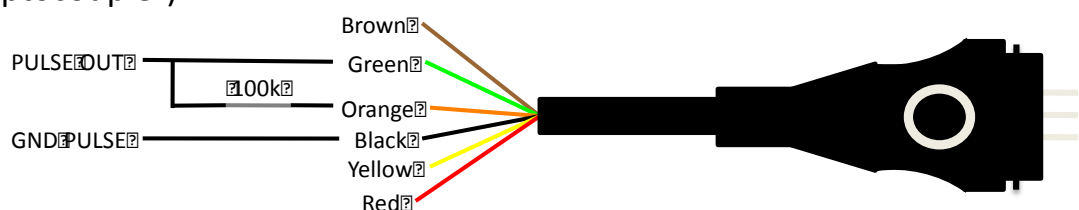
Consult the Dyzle Hardware Installation Manual for the general installation instructions for Y-Tags at a stationary or mobile location. Also consult the connecting diagram below for the Y-Tag Pulse.

## Connect diagram Pulse-Tag

### Pulse (current)



### Pulse (Optocoupler)



Note: A Optocoupler does not create any current-pulses. As the current pulses are measured by providing a current, a 110k resistor has to be installed between the orange and the green wire.

## 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.

## 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.



## 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.