



TOF RTLS TECHNOLOGY

**Reference
Guide**

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For permission, contact:

Pluritag inc. 462 rue Des Forges, Trois-Rivières, Qc ,Canada

Phone: 819-372-3336

Warranty

Limited Warranty Statement

PLURITAG INC. warrants this product against defects in material or workmanship for the original owner and any subsequent end user owner(s) ("You" or "Your") for the time periods and as set forth below. Pursuant to this Limited Warranty, PLURITAG INC. will, at its option, (i) repair the product using new or refurbished parts or (ii) replace the product with a new or refurbished product. For purposes of this Limited Warranty, "refurbished" means a product or part that has been returned to its original specifications. In the event of a defect, these are your exclusive remedies. PLURITAG INC. does not warrant that the operation of the product will be uninterrupted or error-free.

Term

The term of this Limited Warranty is one year from the original date of purchase of the product.

Product Coverage

This Limited Warranty covers only the hardware components packaged with the product. This Limited Warranty does not cover any software or other included content; any such software or content is provided "AS IS" unless expressly provided for in any enclosed software Limited Warranty. Please refer to the End User License Agreements included with the product for your rights and obligations with respect to the software.

Related information

The following document provide more information about PLURITAG'S:

- TOF RTLS Reader
- TOF RTLS Asset Tag

Introduction

PLURITAG'S TOF technology is a RTLS system based on Decawave's DWM1001 module. This module uses a Decawave's DW1000 UWB transceiver IC compliant with IEEE-802.15.4-2011. The purpose of the technology is to do indoor localization using readers and tags deployed at a customer's site. The readers are installed at known positions and tags are used on items that needs to be localized inside plants or buildings.

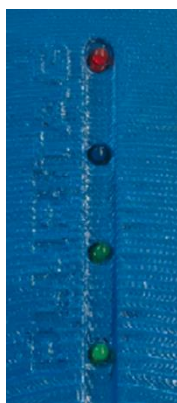


Figure 1-1 TOF RTLS Reader



Figure 1-2 TOF RTLS Asset Tag

The TOF RTLS reader is equipped with four status indicators on the top of the enclosure. These LEDs provide indication of the following:



Fault – Indicates a fault occurred.

Future uses.

Connection to the TOF RTLS Server
Solid = Connected, Blinking = No connection to the server

Power – Indicates that power is applied to the reader.

Figure 1-3 TOF RTLS Reader

Reader Software

The TOF RTLS Reader is shipped with a web console that can be used to configure the reader. This console is an embedded application that provides the ability to configure the reader across a network. Enter the IP address of the TOF RTLS Reader into a web browser. This application provides the ability to modify the reader's communication, network, and operational parameters.

Reader Installation



10/100BaseT Ethernet Port

Figure 1-4 TOF RTLS Reader connection ports.

1. Connect the Ethernet cable to the Ethernet port.
2. Connect the AC power supply to a power outlet.
3. Configure your network adapter with the IP 192.168.50.2 with a netmask of 255.255.255.0
4. Open a browser. Recommended browser is IE11 Enter <http://192.168.50.5>
5. The User login window appears. The default username/password are: admin/admin

Specifications

Model	TOF RTLS Reader
Blink rate (Hz)	Programmable from : 0.1s to 60s
Frequency	6.5 GHz
System Memory	1 GB DRAM and 16GB FLASH
Communication Ports	1 Ethernet 10/100 Mbps
Wifi Communication	802.11 B/G/N - 2.4 GHz
Environmental/Physical/Power	
Operating Temperature	0°C to 50°C
Power	5V, Type SW-10-5-N
Length	14 cm
Width	14 cm
Height	6 cm
Weight	235g

Model	TOF RTLS Asset Tag
Blink rate (Hz)	Programmable from : 0.1s to 60s
Frequency	6.5 GHz
Environmental/Physical/Power	
Operating Temperature	0°C to 50°C
Power	SAFT LS17500 3.6V
Length	7 cm
Width	7 cm
Height	2 cm
Weight	60g

Power Supply

Use ONLY a LISTED, type no SW-10-5-N (5V DC/ 2A max) power supply. Use of alternative Power Supply will invalidate any approvals given to this unit and may be dangerous.

Warnings for Use of Wireless Devices

Please observe all warnings notices with regard to the usage of wireless devices.

Potentially Hazardous Atmospheres

You are reminded of the need to observe restrictions on the use of radio devices in fuel depots, chemical plants etc. and areas where the air contains chemicals or particles.

Safety in Hospitals

Wireless devices transmit radio frequency energy and may affect medical electrical equipment. When installed adjacent to other equipment, it is advised to verify that the adjacent equipment is not adversely affected.

RF Exposure Warning

The antenna(s) shall be installed to provide a separation distance of at least 20 cm from nearby persons. The maximum antenna gain is 0 dBi.

Avertissement d'exposition RF

L'antenne (s) doit être installée pour fournir une distance de séparation d'au moins 20 cm des personnes voisines. Le gain d'antenne maximal est de 0 dBi.

Regulatory Information

This technology is designed to be compliant with rules and regulations in locations they are sold and will be labeled as required. Any changes or modifications to PLURITAG equipment, not expressly approved by PLURITAG, could void the user's authority to operate the equipment.

Country Approvals

This technology is approved for use in the following countries: United States, Canada.
Operation of the devices without regulatory approval is illegal.

Radio Frequency Interference

Requirements – FCC

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Radio Transmitters (Part 15)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment may only be operated indoors. Operation outdoors is in violation of 47 U.S.C. 301 and could subject the operator to serious legal penalties.

Radio Frequency Interference

Requirements – Canada

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions: This device may not cause interference. This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :
L'appareil ne doit pas produire de brouillage;
L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

FCC and Industry Canada information.

TOF RTLS Reader

FCC ID: 2AP77PLURITAG

IC: 24070-PLURITAG

TOF RTLS Asset Tag

FCC ID: 2AP77PLURITAG1

IC: 24070-PLURITAG1

WiFi - Reader only

FCC ID :2ABCB-RPI32

IC : 20953-RPI32
