AY-U920BT

UHF SMART™ Extended Long-Range Reader

Datasheet

Introduction

The AY-U920BT is a unique UHF-RFID credential reader with Rosslare BLE-ID™ credential read capability (for both iOS and Android). Installers can configure a wide range of operating parameters using our Rosslare BLE-Admin™ app. AY-U920BT brings a new level of convenience and productivity. The UHF read mode is ISO18000-6C (EPC GEN2) compliant. The reader is suitable for outdoor use in a wide range of RFID applications such as access control, transport management, vehicle management, car parking, and production process control, and works with almost every third-party controller. Choose Rosslare for professional “security that lasts”.

General Description

By reading both UHF and Bluetooth (BLE-ID), the reader enables system integrators to develop new solutions, such as multi-factor authentication. The AY-U920BT can be configured to read up to 70 credentials within the read range, and to buffer the output to the host controller in Wiegand 26-bit to 128-bit or SIA Open Supervised Device Protocol (OSDP V2) including SCP mode (Secured Channel Protocol) to let the reader connect to any controller that supports OSDP.

The reader comes with an installation bracket kit for pole mounting, a 5-m-long 10-wire cable, and a switching power supply. The RS-485 OSDP wiring allows a maximum cable distance of 1000 m (3280 ft), and the Wiegand wiring allows a maximum cable distance to the host controller of 150 m (492 ft).

Main Features

- MD-81 functionality built-in
- Wide range of UHF credential form factors available
- UHF read range up to 12 m (39 ft)
  UHF credential cannot be installed in RF-proof vehicles.
- Supports Bluetooth communication for Rosslare BLE-ID™ smartphone apps for Android and iOS
- Can read up to 10 credentials per second or down to 1 credential per second (programmable)
- IP67 water and dust resistant, IK10 vandal resistant
- RGB LED used for operational indication

Professional Grade Features

- Supports OSDP V2 including secure channel using AES 128-bit encryption for improved security with an extended range, up to 32 addresses
- Supports mobile BLE Admin app for parameter configuration capability

Specifications

ELECTRICAL SPECIFICATIONS	
Operating Voltage Range	9 to 15 VDC (2 A)
Input Current	Standby: 0.2 A max, Read: 1.2 A max
Light Bar / Buzzer Controls	Dry Contact, N.O.
Credential Read Distance*	0.5 to 12 m (1.6 to 39.4 ft) (adjustable up to 29 dBm) * Read range was tested with Rosslare's LT-UVS-26A-3000 card
BLE-ID Credential Read Distance*	Up to 12 m (39.4 ft) (adjustable) – Line of sight. * Read range was tested with iPhone7 and Huawei P10
Transmission Protocol	Wiegand (Custom: Wiegand 26-bit up to 128-bit) OSDP V1 and V2 Secure Channel
Maximum Cable Distance	Wiegand: 150 m (492 ft) with 18" AWG cable OSDP: 1,200 m (4,000 ft) with 18" AWG twisted shielded cable
Frequency	• AY-U920BT US: 902–928 MHz (America) RFID • AY-U920BT EU: 865–868 MHz (Europe) RFID • Bluetooth: 2.402-2.480 GHz
Hopping	The reader uses frequency hopping
Read Sensitivity	Dual polarization read mode
Cards and Tags	Rosslare's LT-UVS-26A-3000 and LT-UVH-26A-7000 • EPC GEN2 (ISO18000-6C) tags • BLE-ID soft credentials
ENVIRONMENTAL SPECIFICATIONS	
Vandal Resistance	IK10
Operating Temp. Range	-35°C to 60°C (-31°F to 140°F)
Operating Humidity Range	0 to 95% (non-condensing), Suitable for outdoor use (IP67)
PHYSICAL SPECIFICATIONS	
Dimensions	36.5 x 36.5 x 3.2 cm (14.4 x 14.4 x 1.3 in.)
Weight	2.8 kg (6.2 lb)

UHF Credentials: refer to the UHF credentials datasheet for additional details about compatible UHF credentials.

System Components: The AY-U920BT is compatible with standard access controllers. Packaging Includes AY-U920BT with 5-meter pigtail cable, pole mounting bracket, screw kit, AC/DC 2 amp power supply (gross).

Product Warranty: 2-year limited product warranty

For more information regarding support, visit https://support.rosslaresecurity.com.