

# AY-U920BT

UHF SMART™ Extended Long-Range UHF-RFID  
and Rosslare BLE-ID™ Reader

UHF  
SMART



Bluetooth®  
BLE 4.1

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), 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 64-Bit or SIA 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)

- 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)
- IP65 for indoor and outdoor use
- RGB LED used for operational indication

## PROFESSIONAL GRADE FEATURES

- Supports OSDP reader profile according to v2.1.7 standard from Security Industry Association (SIA)
- Supports mobile Admin app for parameter configuration capability

# SPECIFICATIONS

## ELECTRICAL SPECIFICATIONS

■ Operating Voltage Range	9 to 12 VDC (2 A)
■ Input Current	Standby: 0.2 A max, Read: 1.2 A max
■ Credential Reading Distance*	Up to 12 m (39.4 ft) (adjustable) * Read range was tested with Rosslare's LT-UVS-26A-3000 card
■ BLE-ID Credential Reading Distance*	Up to 12 m (39.4 ft) (adjustable) – Line of sight. * Read range was tested with iPhone7 and Huawei P10
■ Transmission Protocol	Wiegand 26-Bit (Custom: Wiegand 34-Bit up to 64-Bit)
■ Maximum Cable Distance	150 m (500 ft) – Wiegand mode 1000 m (3000 ft) RS-485 – OSDP Mode
■ Frequency	AY-U920 BT US: 902–928 MHz (America) RFID AY-U920 BT 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 ISO18000-6B Tags EPC GEN2 (ISO18000-6C) Tags BLE credential using a mobile smartphone

## ENVIRONMENTAL SPECIFICATIONS

■ Operating Temp. Range	-20°C to 80°C (-4°F to 176°F)
■ Operating Humidity Range	0 to 95% (non-condensing) Suitable for outdoor use (IP54)

## PHYSICAL SPECIFICATIONS

■ Dimensions	44.5 x 44.5 x 6.7 cm (17.5 x 17.5 x 2.6 in.)
■ Weight	Gross: 4.2 kg (9.2 lb); net 3.5 kg (7.6 lb)

## 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).

## UHF CREDENTIALS

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

## PRODUCT WARRANTY

2-year limited product warranty

## ABOUT ROSSLARE SECURITY

Rosslare Security Products manufactures and markets high-quality security products via its worldwide offices and channel partners. Since 1980, Rosslare has offered high-quality systems for enterprise, small business, and residential applications. With Rosslare, you receive the best of all worlds: world-class product engineering and design; professional customer service spanning the globe; and the quality and affordability of a vertically integrated and self-owned manufacturing facility. Our expansive product range features much more than access control solutions and guard patrol management systems; we also offer applications software – such as License Plate Recognition, Time & Attendance, and DVR/alarm integration.

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