



**A528B**

**OEM UHF Compact Reader**



**The perfect match to your high performance devices**

#### Features

- Multi-Regional Support
- EPC C1 G2, ISO 18000-6C Compliant
- Compact Size
- External Antenna Connector
- SW programmable output power up to 500mW (27dBm) conducted

#### Applications

- Handheld Devices
- Multiregional Label Printers and Applicators
- Point of Sales Devices
- Self-service Kiosks
- Industrial Automation Read Points

#### General Info

The Muon (Model A528B), OEM reader of the easy2read<sup>®</sup> Family, is an UHF multiregional compact reader for high performances UHF RFID applications.

With programmable output power in 8 steps from 10dBm to 27dBm, the reader can detect tags up to 3m of distance (depending on antenna and tag dimensions).

Due to its form factor, the module is specifically designed to be easily embedded either in battery powered devices, such as industrial handhelds, or fixed reading point devices, such as printers, point of sales, self-service kiosks or industrial automation readers.

The radio frequency core of the module allows to achieve fast reading/writing and operation in dense reader and dense tag environments for top-class rated performances.

The A528B complies with and can operate in both European and US regulatory environments and, due to its multiregional capabilities, it's ideal for integration in devices requiring compliance to different geographical regions.



**easy2read® Family**  
 The easy2read® family constitutes a complete and reliable product line of readers for any Auto-ID need. A reading range from a few centimetres up to 7-8 metres distance makes the easy2read® family suitable for applications such as access control, UHF gates, desktop reading or OEM modules for integration into handheld or printer devices.

- OEM Readers
  - Fixed Readers
  - Desktop Readers
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**Technical Specifications Table**

<b>Frequency Range</b>	902÷928 MHz (FCC part 15.247) 865.600÷867.600 (ETSI EN 302 208 v1.4.1)
<b>RF Power</b>	Programmable in 8 levels from 10 dBm to 27 dBm
<b>Output Power Accuracy</b>	+/- 1dB
<b>Antenna VSWR Requirement</b>	2:1 or better for optimum performances
<b>Antenna Connector</b>	Nr. 1 MMCX type
<b>Frequency Tolerance</b>	±10 ppm over the entire temperature range
<b>Number of Channels</b>	4 channels (compliant to ETSI EN 302 208 v1.4.1) 50 hopping channels (compliant to FCC part 15.247)
<b>Standard Compliance</b>	EPC C1G2
<b>Forward link characteristics</b>	DSB-ASK 40kBit/s PR-ASK 40kBit/s DSB-ASK 160kBit/s (FCC only)
<b>Return link characteristics</b>	FM0 40kbit/s Miller encoding (M=4;LF=250kHz) Miller encoding (M=4;LF=300kHz) FM0 400kbit/s (FCC only)
<b>Digital I/O</b>	4 I/O lines 3.3V out @ 3mA; 5V tolerant
<b>Connectivity</b>	UART Serial Port: Baudrate: up to 115200 Databits: 8 Stopbits: 1 Parity: none Flow control: none 3.3 V level
<b>Dimensions</b>	(W) 42 x (L) 60 x (H) 6.3 mm <sup>3</sup> (1.65 x 2.36 x 0.25 inch <sup>3</sup> )
<b>Power Consumption</b>	1A max @ 5 VDC (TX/RX mode) 230 mA @ 5 VDC (idle mode)
<b>DC Power</b>	4.75VDC ÷ 5.25VDC ripple and noise < 100mVpp ripple frequency > 100kHz
<b>Operating Temperature</b>	-20 °C to 60 °C
<b>Weight</b>	18 g

**Ordering Options**

Code	Description
<b>Reader</b>	
WA528BXAAAAA	A528B - Muon - Compact Embedded UHF RFID Reader
<b>Development Kit</b>	
WA528BXDKAAA	A528BDK - Development kit with A528B reader, antennas, cable and demo tags
<b>Accessories</b>	
WANTENNAX004	Linear polarized 3db gain PIFA antenna for portable and desktop systems (870 MHz)
WANTENNAX008	Linear polarized antenna for handheld units (865 - 870 MHz)
WANTENNAX009	Linear polarized antenna for printers (865 - 870 MHz)
WANTENNAX010	Linear polarized 3db gain PIFA antenna for portable and desktop systems (915 MHz)
WANTENNAX011	Linear polarized antenna for handheld units (902 - 928 MHz)
WANTENNAX012	Linear polarized antenna for printers (902 - 928 MHz)
WA528ADATX01	A528B (MUON) USB/RS232 Adapter Board
WALIM0000002	Power Supply for A528 Adapter Board



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