DATA SHEET

UHF Reader with CPU + GPRS RF 1600 MI

Product Description	UHF (Multiregion) Reader RF 1600 MI

The RF 1600 MI , is the top-of-the-range portal reader of the easy2read© Family.

It has carefully designed the device taking into account customer requests and on-field experience on RFID installations. The result is not only an UHF reader, it's a unique combination of outstanding RFID reading performances, computing power and communication capabilities. The reader is optimized for portal installations, featuring full power to up to 4 antennas, GEN2 Dense Reader Mode management and high speed read rates. Based on an embedded HW architecture (x86) and standard operating system (Linux), the RF 1600 MI eases the development of custom software and solutions.

The on-board computing power and connectivity remove the need for an external PC and related cabling. This results in deployment and operations cost savings, thus reducing the total cost of ownership of installed devices. The RF 1600 MI is best suited for complex AutoID scenarios, where the information can be collected and fed directly to the reader from multiple sources such as Smart Card readers, Barcode readers, GPS and other in-field sensors.

All data can be handled locally through data buffering, filtering and aggregation, in order to directly provide decision-making data to higher level Business Intelligence processes. The same data can also trigger local actuators and screen displays for in-field real-time processes in a standalone mode. The presence on board of an optional integrated GPRS modem, together with its compact and versatile form factor, allow to use it in any worldwide installation requiring RFID usage in remote areas.

As a result of all the above, the RF 1600 MI allows solution providers to customize the reader to each application, thus creating their own specialized devices accordingly. The RF 1600 MI complies with and can operate in different regulatory environments (Europe, US, Australia, China, Korea, Japan, Singapore, Taiwan).

Electrical Characteristics

Frequency	865.6 ÷ 867.6 MHz (ETSI EN 302 208) 902 ÷ 928 MHz (FCC part 15)
RF Power	Up to 32 dBm (1.6W) conducted (ETSI) Up to 30 dBm (1W) conducted (FCC)
CPU	Intel Atom Z510 CPU @ 1.1Ghz
Memory	512 Mbytes RAM, 512 Mbytes SSD, 8 Gbytes MicroSD
OS	Linux (Debian)
Scripting	Java Virtual Machine
Standard compliance	EPC C1 G2/ISO 18000-6C
Host Interface protocol	- EPCGlobal LLRP RFID host-to-reader protocol - CAEN RFID host-to-reader protocol
Antenna connector	4 TNC Reverse Polarity
Receiving Capability	Gen 2 Dense Reader Mode Management Data rate up to 400 Kbits/s
Digital I/O	13 GPIO pins, TTL level
Connectivity	RS232 Serial Communication (DB9); USB 2.0 High Speed Host Port; Ethernet 10/100/1000BASE-T (RJ45)
Wireless Communication	GSM/GPRS (SMA) (optional) WiFi (optional via USB host)
Internal Interfaces	MicroSD slot, SIM card housing (optional
Protection	IP42
MTBF	135.000 hours
Dimensions	(W)275 x (L)155 x (H)39 mm3 (10.8 x 6.1 x 1.5 inch3)
Electrical Power	9÷36 Vdc (30W)
Operating Temperature	.-20 °C to +55 °C
Weight	1,3kg

Article no:	**RF 1600 MI**

Typical Applications

Automotive	Chemical/pharmaceutical products
Transport	Logistics
Logistics	Industry