DATA SHEET

AGILLOX

AGX RadioForce 500USB
(500 mW UHF Reader
10 cm - 3 m read range)

Product Description	AGX RadioForce 500USB

The AGX RadioForce 500USB reader 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).

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 AGX RadioForce 500USB 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.

Electrical Characteristics

Operating Frequency	902÷928 MHz (FCC part 15) 865.600÷867.600 (ETSI EN 302 208)
UHF Standards	EPCglobal Gen 2 (ISO 18000-6C) with DRM, ISO 18000-6B (optional) and IP-X (optional)
Output Power	Programmable in 8 steps up to 500 mW @ 5 V (27 dBm)
Number of channels	10 channels (compliant to ETSI EN 302 208) 50 hopping channels (compliant to FCC part 15)
Frequency tolerance	±10 ppm over the entire temperature range
Read range	Depending on the performance of the transponder, frequency, chip type and the system environment. RadioForce 500SUB (10cm - 3m)
Communication interface	1 USB A connector I/O plus 1 USB for additional 5V DC
USB Device Port	One USB 2.0 Full Speed (12 Mbits per second) device port.
Digital I/O	Four I/O lines 3.3V out, 5V tolerant
Power supply	4.75VDC ÷ 5.25VDC ripple and noise < 100mVpp ripple frequency > 100kHz
Power consumption	1A peak @ 5 V (TX/RX mode), 230 mA @ 5 V (idle mode)
Operational temperatur	from - 20°C up to 60°C
Size	Size: 120 x 105 x 30 mm ± 0,3mm
Protection class	IP54
Antennea connector	SMA connector / 50 Ohm
Certificates	FCC, ETSI
max. cable length	up to 3m
Gehäuse	Aluminium / black painted
Weight	315 gr
Article No.:	500mW / 1 SMA Antenna connector	**AGX RadioForce 500USB**

Typical Applications

harsh environment applications	Sport events
automotive industry and laboratory	identification and back tracing
bio/chemistry/forensic/pharmacy/environment	beverages logistics