

<Model> UHF RFID Standalone Network Reader

Hardware Technical Specifications Draft 1.1:

UHF Protocol	EPC Class1, C1G1/C1G2, ISO-18000-6B / 6C
Operational Frequency	860-960 MHz, Universal Operation (region-wise pre-programmed frequency)
Work Mode	FHSS
Transmit Power	0-30dBm, Software configurable
Read Speed	100 Tags per second
Read Type	Asynchronous or Event Driven or Timed intervals or External I/O triggered
Data Ports and I/Os	Standard 100Mbps Ethernet TCP/IP (Optional WiFi port) + 1 Full Serial RS232 (for external device) + 8 I/Os (software configurable) + (Optional) ZigBee or Bluetooth (Active RFID)
Internal Memory – Flash (Code Block)	1 MB
Internal Memory – RAM / Volatile	2 KB
Internal Memory – Flash (Data Block)	2 GB Internal Data store (can be made external)
Real Time Clock	RTC with Internal battery backup (7 years)
UHF RFID Antenna	Internal 2dBi or SMA(F) connector for External Antenna or 8-port Mux with SMA(F)
Power Supply	7-60 VDC / 1 Amp. (external SMPS Adaptor)
Dimension	(125 x 75 x 45) mm, customizable
Weight	~ 2.7 kg
Environmental Working Specs	-20 to +80 degC, 90% RH, Self-cooled
Audio-Visual Indications / Controls	3 bi-color LEDs (Power/Read, Link, Error) Buzzer (3 software settable tones), 2 Toggle buttons (On/Off and Online/Offline)
Read Range (Suggested)	Max. 7 meters (20 feet)
Certifications / Approvals	CE, ISO, UL (Optional)

Software APIs Technical Specifications (.NET Software Drivers included) Draft 0.1:

<u>API Name</u>	<u>Purpose</u>	<u>Description</u>	<u>Comments</u>
Read	Read Tags in Range		
Write	Write to a Tag		
Async	Set/Reset continuous read mode		
Transfer	Data transfer out from Internal memory		

The Desktop Model RFID Reader has 100Mbps Ethernet port for: (1) Configuration, Settings (2) Data read / transfer, and (3) Debugging. One Serial RS232 port for external device connections (fixed functionality, not user controlled) is also available.

Base level software drivers (.NET) will be provided for application development.

<Model> UHF RFID Handheld Reader

Hardware Technical Specifications Draft 1.1:

UHF Protocol	EPC Class1, C1G1, C1G2, ISO-18000-6B / 6C
Operational Frequency	860-960 MHz, Universal Operation
Work Mode	FHSS
Transmit Power	0-30dBm, Software configurable
Read Speed	100 Tags per second
Read Type	Asynchronous or Manual Mode (Read button)
Data Ports and I/Os	In-built WiFi + USB 2.0 Slave + USB Host OTG port for Thumb Drive (upto 2 GB max, for data transfer only, not required for operation)
Internal Memory – Flash (Code Block)	1 MB
Internal Memory – RAM / Volatile	2 KB
Internal Memory – Flash (Data Block)	2 GB Fixed Internal Data storage
Real Time Clock	RTC with Internal battery backup (7 years)
UHF RFID Antenna	Internal 2dBi
LCD and Keypad	128x64 illuminated Monochrome white Graphics LCD, 4x4 Keypad (*)
Power Supply	Internal Li-Ion Battery with Charger, External 6-30 VDC / 1 Amp. (SMPS Adaptor provided)
Dimensions	(75 x 45 x 35) mm, customizable
Weight	~ 0.8 kg
Environmental Working Specs	0 to +50 degC, 70% RH
Audio-Visual Indications	3 bi-color LEDs (Power/Read, Link, Error), Buzzer (3 software settable tones)
Read Range (Suggested)	Max. 2 meters (6 feet)
Certifications / Approvals	CE, ISO, UL

Software APIs Technical Specifications (.NET Software Drivers included) Draft 0.1:

<u>API Name</u>	<u>Purpose</u>	<u>Description</u>	<u>Comments</u>
Read	Read Tags in Range		
Write	Write to a Tag		
Async	Set continous read mode		
Transfer	Data transfer out from Internal memory		

*Keyboard and Graphics LCD operations to be customized

The Handheld RFID Reader has Standard WiFi port for: (1) Configuration, Settings (2) Data read / transfer, and (3) Debugging. One USB 2.0 Slave port and one USB OTG Master port for external device connections (fixed functionality, not user controlled) are also available. Base level software drivers (.NET) will be provided for application development.