



## Search and Find ATSF1153 wearable Rfid reader



### Rfid Item Search and Find Performance Like No Other

The ATSF1153 is the fruit of decades of research and development culminating in feature full firmware that operates seamlessly with simple plug and play software. The unique features of this device allow items to be found in seconds wherever they may be located be it on display, stock room rails or even in densely stacked bins or totes. With its compact and lightweight form factor, the Artemis ATSF1153 *Bluetooth*<sup>®</sup> UHF RFID reader has an outstanding performance and gives the user an extremely compact and lightweight multifunction data collection device.

As an **employer**, you have a **duty of care** to your **employees** and therefore you are required to take all necessary precautions to ensure the physical and mental wellbeing of your staff. The Health and Safety Act sets out **work**-related issues to be mitigated for potential risks to staff. This includes safe handling of rails and stacked totes, when moving which requires the use of both hands.

Unlike conventional Rfid readers that would have to be put down to satisfy the above which will result in potential distraction and sometimes even forgetting the place where the reader was last left\*). Using the ATSF1153 leaves your hands and fingers free so items can be moved safely in accordance with all Health and Safety occupational notes. When the item is finally tracked and located you have the option to manually either **accept** or simply **verify** using the dual function rocker trigger to scan the barcode. The ATSF1153 is equipped with a high performance 2D data scanning allowing it to bring unparalleled data collection capabilities to any host the reader is connected to. The Motorola SE4500 engine incorporates fast-pulse illumination and fast sensor shutter speeds, delivering outstanding motion tolerance and class.

\* *Unique firmware feature reduces the risk of accidentally losing the ATSF1153.*

Additional to the unique Search and Find function, the device is able to read and write to EPC Class 1 Gen 2 (ISO18000-6C) tags,

The ATSF1153 also includes a base station charger with an additional spare battery on stand-by which remains fully charged, ready to go.

Charging could not be any simpler, just offer up the reader to the charging station and the unique data charge mag catch DCMC<sup>®</sup> both locates and connects the reader. Easy view multi coloured LEDs give an indication of docking and charge level and can clearly be seen from a long distance away.

# ATSF1153 SPECIFICATION

## Physical and Environmental Characteristics

Dimensions (LxWxH):	10.2 cm x 5.5 cm x 5.6 cm
Weight (inc battery):	157 g / 5.5 oz
User input:	Two Trigger buttons
User feedback:	Speaker, vibration motor, three LEDs
Power:	Removable, rechargeable 3.7 volt Lithium Polymer 1130 mAh battery pack, 4.2 watt hrs

## Performance Characteristics

RFID engine:	AMS AS3993 based
Communication protocols:	TSL® ASCII 2.0 parameterised command set
Memory:	Optional Micro SD card (maximum 32GB capacity supported). Up to 500 million date and time stamped EPCs can be stored on a 32GB Micro SD card
Compatible Host devices (Bluetooth®):	Any Bluetooth® Host supporting the Serial Port Profile (SPP) or Human Interface Device (HID) profile (Android, iOS, Linux, Mac, Windows).
Compatible Host devices (USB):	Any USB host with FTDI VCP driver support (Windows, Linux, Mac, Android)

## Environmental

Operating Temp.:	-10°C to 40°C (14°F to 104°F)
Charging Temp.:	5°C to 40°C (41°F to 104°F)
Storage Temp.:	Less than 1 month at at -20 to +60°C Less than 3 months at -20°C to +45°C Less than 1 year at -20°C to +30°C
Humidity:	5% to 85% non-condensing
Drop Spec:	Multiple drops to concrete: 4 ft./1.2 m ambient, 3ft / 0.9m across the operating temperature range
Tumble:	500 0.5 metre tumbles at room temperature (1,000 cycles)
Environmental Sealing:	IP54
Electrostatic Discharge (ESD):	± 15kVdc air discharge; ± 8kVdc contact discharge
MIL-STD 810F:	Meets and exceeds applicable MIL-STD 810F for drop, tumble and sealing

## RFID Performance

Standards supported:	EPC Class 1 Gen 2
Nominal read range <sup>1</sup> :	up to 6.5 ft./up to 2 m.
Nominal write range <sup>2</sup> :	up to 3.3 ft./up to 1 m.
Field:	150-degree forward facing (approx.) measured from front of device
Antenna:	Internal Circularly Polarized

Frequency Range:	EU: 865-868MHz; US: 902-928MHz
Maximum Output Power:	26dBm EIRP <sup>3</sup>

## Barcode Scanning

Imager:	Motorola SE4500 2D imager
Sensor Resolution:	752 x 480 pixels
Field of View:	Horizontal: 40°, Vertical: 25°
Focal Distance:	SR: 8 in. DL: 5.3 in. HD: 2.9 in.
Aiming LED (VLD):	655 ±10 nm Laser
Illumination Element:	625 ±5 nm LEDs (2x)
Min. Print Contrast:	Minimum 25%
Symbologies Supported:	1D: All major codes 2D: PDF417, MicroPDF417, Composite, RSS, TLC-39, Datamatrix, QR code, Micro QR code, Aztec, MaxiCode Postal Codes: US PostNet, US Planet, UK Postal, Australian Postal, Japan Postal Dutch Postal (KIX)
Ranges:	DL Focus      Near      Far 5 mil Code 39    1.4 in./36 mm    7.3 in./185 mm 100% UPC        1.6 in./41 mm    12 in./305 mm 5 mil PDF417    2.8 in./71 mm    4.5 in./114 mm

## Communication

Bluetooth®:	Bluetooth® Version 2.1
Bluetooth® Profiles:	SPP Profile, HID Profile, Apple iAP
Bluetooth® Power:	Class 2
Bluetooth® Range <sup>4</sup> :	30m
Bluetooth® Pairing:	PIN, Simple Secure Pairing, NFC OOB Pairing

## Peripherals and Accessories

External interface:	data charge mag catch DCMC® cable attachment to USB supplied separately
USB operating modes:	Real time data capture in conjunction with SmartWedge software. Download of stored scan data.
Desk top charger:	Supplied with charging station and 1 spear battery. Additional devices and batteries can be purchased separately

## Regulatory

General:	Approved for use in the US, Canada, Europe, Australia, Thailand and UAE.
Electrical Safety:	Certified to UL60950-1, CSA C22.2 No. 60950-1, IEC 60950-1, EN 60950-1
EMI/RFI:	USA: FCC Part 15 Canada: ICES 003 Class B EU: EN 301 489-3, EN 301 489-1, EN 301 489-17, EN 302-208, EN55022 Class B, EN55024 and other countries' specific standards.
Laser Safety:	IEC Class2/FDA Class II in accordance with IEC60825-1/EN60825-1, 21CFR1040.10