



RFID systems

POINT OF SALE READER

When choosing to expand RFID loss prevention with inventory software or if you want to avoid unnecessary alarms at the store exit, there is the option of adding a point of sale solution that is specially designed increases the speed of payment at cash registers.

Benefits:

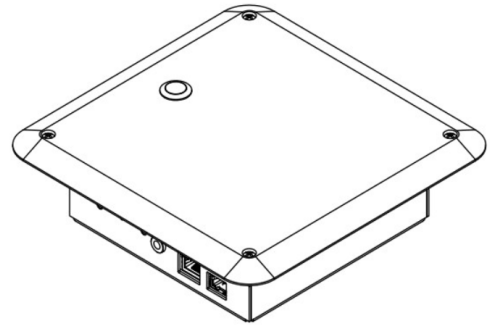
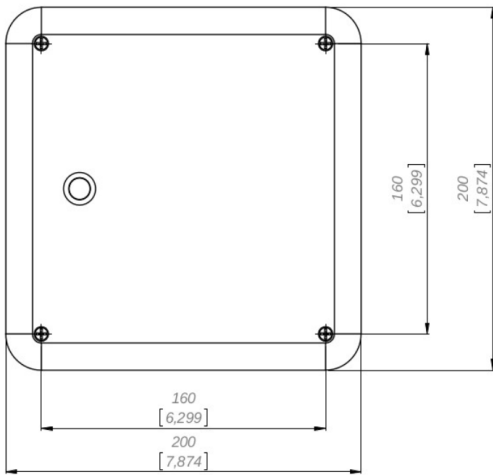
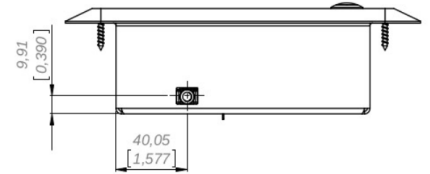
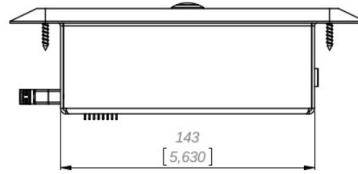
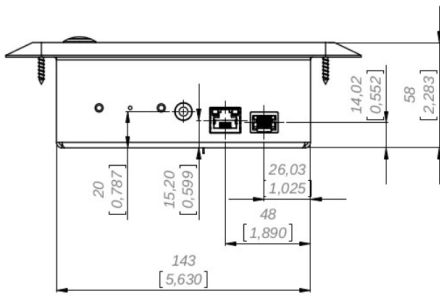
- Queues reduction, thanks to a much faster payment process
- Combines 2 processes in one (hard tag detachment and product identification)
- Offers 3 operation modes: payment mode, return mode, and read-only mode
- High power
- Highly confined reading area
- Easy, flexible installation and monitoring
- Improvement in the customer shopping experience derived from a shorter payment time



POINT OF SALE READER System design



POINT OF SALE READER System dimensions



Technical data

Air Protocol Interface	EPCglobal UHF Class 1 Gen 2 / ISO 18000-6C
Supported regions	FCC (NA, SA) (917.4 – 927.2) MHz ETSI (EU) (865.6 - 867.6) MHz TRAI(India) (865 - 867) MHz KCC (Korea) (917 – 923.5) MHz MIC (Japan) (916.9 – 923.4) MHz ACMA (AU) (920 – 926) MHz NZ (New Zealand) (922 - 927) MHz SRRC-MII (P.R.China) (920.125 – 924.875) MHz Brazil (917.4 – 927.2) MHz by using channel selection Chile(917.4 – 927.2) MHz by using channel selection Peru (917.4 – 927.2) MHz by using channel selection Taiwan (922.600 – 927.2) MHz by using channel selection Open Region (859 – 873) MHz and (915 – 930) MHz (by using channel selection) ¹
RF Power	Programmable from 0 dBm to +27 dBm in 0.5 dBm steps
RF antenna	Integrated circular polarized antenna. RF field is confined to avoid reading unwanted tags.
Max tag read distance	< 30 cm ²
Data communications	Ethernet: • IEEE 802.3 up to 100 Mbps Micro USB: • HID to emulate barcode reader Ethernet over USB (USB Type-B connector) ³ Maintenance only port ⁴ • USB Type B connector as an alternative to the Ethernet communications port in case the Ethernet interface is not available. When the USB port is connected, a virtual Ethernet interface will be created in the host computer.

¹ Band is defined as a carrier sub-set from FCC. There is no specific Surface Acoustic Wave (SAW) filter for the band.

² Read distance is given with the default conducted power: 10 dBm. Larger conducted power will increase read range.

³ Only available in the non-enclosed readers

⁴ The device is class B under EN 55022. Use this USB port only for maintenance or troubleshooting operations. When this USB port is used, the device may cause radio interference in which case the user may be required to take adequate measures.

Technical data

Power supply	Power Over Ethernet (PoE): <ul style="list-style-type: none">• Supports IEEE 802.3af (Type I) and IEEE 802.3at (Type II)• Power consumption: Class 3 On-board battery for RTC chip
On-board sensors and actuators	Buzzer
LED indicators	Payment mode (green) Return mode (red) Read-only mode (blue)
Power consumption	Idle consumption < 2.5 W Default consumption (@10 dBm) < 4 W Max consumption (@27 dBm) < 7 W TODO
Temperature	-20 °C to +55 °C ⁶
Dimensions	Flush mount (CF) 200 mm x 200 mm x 62 mm (7.87 inches x 7.87 inches x 2.44 inches) Under mount (CU) 180 mm x 180 mm x 56 mm (7.09 inches x 7.09 inches x 2.20 inches)
Weight	Flush mount (CF) 1050 g (2.31 lb) Under mount (CU) 725 g (1.60 lb)

Integration

HID keyboard emulation	The micro USB type B connector provides direct keyboard emulation. <ul style="list-style-type: none">• The AdvanNet software, which runs by default inside the device, is required to configure which events are emulated.• To access AdvanNet Manager page is required to connect to the device through HTTP by using the device IP.
Embedded development	It is also possible to use the internal Linux box to build embedded applications. <ul style="list-style-type: none">• Java development: based on a modified ThingMagic Mercury API<ul style="list-style-type: none">• Java development (Java JRE 1.8)• C development: based on Mercury API<ul style="list-style-type: none">• C development (libc 2.13)• REST API: based on AdvanNet REST API
On-board intelligence	ARM board <ul style="list-style-type: none">• Cortex A-8 CPU (1 GHz)• 512 MB RAM• 4 GByte NAND with Operating System

⁶ Temperature range is taken at normal operation at default settings. Using different settings may change that temperature.