# AdvanReader-70A™

Reader with integrated antenna
and confined reading area

# AdvanReader-70A ™
## Confined reading area

## Benefits:

- High flexibility
- Compact design
- Highly controlled reading area
- Easy installation, configuration and integration

## Applications:

- Libraries
- Retail stores
- Document tracking
- RFID programming stations
- Smart display fixtures
- Smart surfaces
- Check-in / check-out of items, people and assets

## Product overview

AdvanReader-70A is a high-performance, high-flexibility reader with integrated antenna ideal for check-in / check-out applications of items, people and assets.

AdvanReader-70A has high output power (27 dBm) and high sensitivity and its confined beam antenna allows to control very well the reading area, even with far field tags, avoiding in this way stray reads.

AdvanReader-70A has an on-board microcomputer and a fully open Linux operating system and comes with a comprehensive set of built-in HW/SW communication options:

- USB HID emulation: allows generating keyboard events based on Reader events.
- HTTP: user-configurable HTTP request generation based on Reader events.
- MQTT: user-configurable MQTT packet generation based on Reader events.
- SQL: user-configurable SQL sentence generation based on Reader events.
- TCP: real-time TCP socket of Reader events.
- REST API

AdvanReader-70A includes an internal buzzer and an internal speaker of 2W for emitting an acoustic signal when an event takes place, e.g. when a tag is read.

AdvanReader-70A includes 3 surface LEDs with different colours that can be configured as desired.

The hardware keyboard emulation functionality hardware (USB Type-B connector) allows a very easy and fast integration with computers used for check-in/check-out applications, without having to modify any application software.

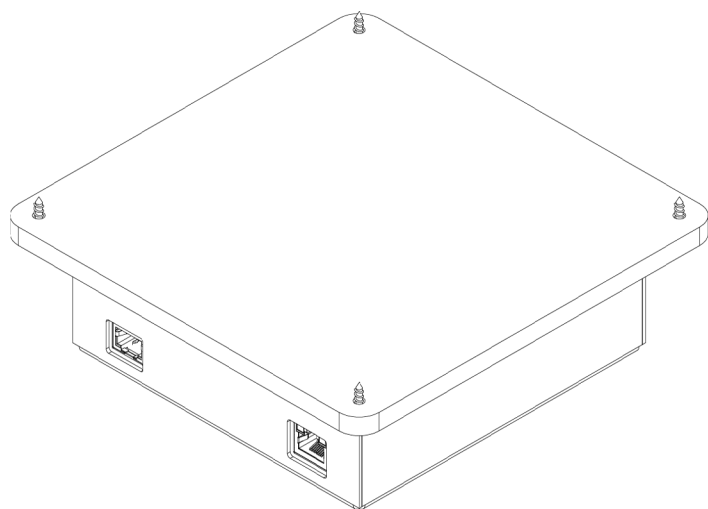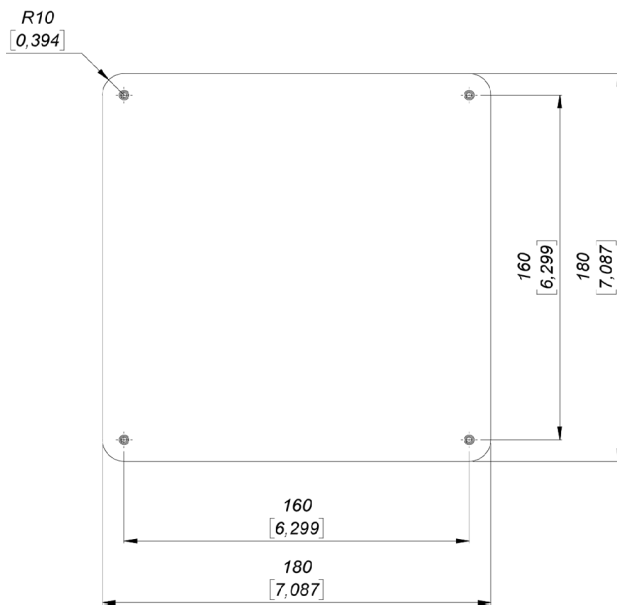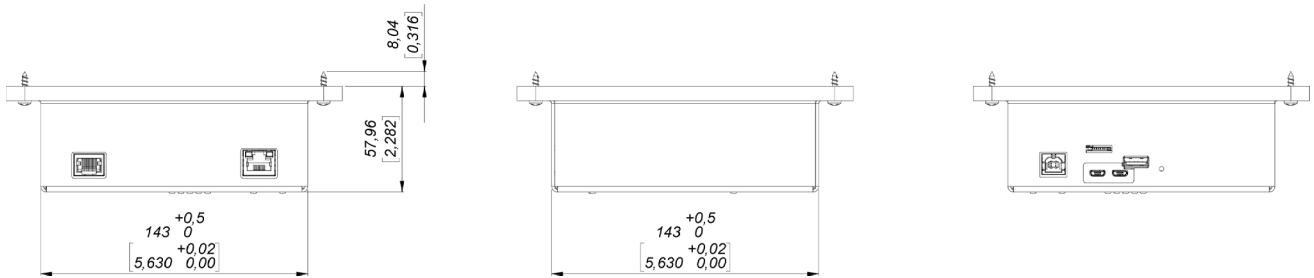The keyboard emulator is easily configured to send the keyboard codes required by each software application.

AdvanReader-70A can also be connected to an Ethernet network switch. This gives the advantages of an Ethernet-enabled device: remote control, centralized management, etc.

## Radiofrequency specifications

| | |
|---|---|
| Air Protocol Interface | EPCglobal UHF Class 1 Gen 2 / ISO 18000-6C |
| Frequency | FCC (NA, SA) (917.4 – 927.2) MHz<br>ETSI (EU) (865.6 - 867.6) MHz<br>TRAI(India) (865 - 867) MHz<br>KCC (Korea) (917 – 923.5) MHz<br>MIC (Japan) (916.9 – 923.4) MHz<br>ACMA (AU) (920 – 926) MHz<br>NZ (New Zealand) (922 - 927) MHz<br>SRRC-MII (P.R.China) (920.125 – 924.875) MHz<br>MY (Malaysia) (919.0 – 923.0) MHz<br>ID (Indonesia) (923.0 – 925.0) MHz<br>PH (Philippines) (918.0 – 920.0) MHz<br>TW (Taiwan) (922.0 – 928.0) MHz<br>MO (Macao) (920.0 – 925.0) MHz<br>RU (Russia) (866.0 – 868.0) MHz<br>SG (Singapore) (920.0 – 925.0) MHz<br>VN (Vietnam) (866.0 – 869.0) MHz<br>TH (Thailand) (920.0 – 925.0) MHz<br>AR (Argentina) (915.0 – 928.0) MHz<br>HK (Hong Kong) (865.0 – 868.0) MHz<br>BD (Bangladesh) (925.0 – 927.0) MHz<br>Brazil (917.4 – 927.2) MHz by using channel selection<br>Chile(916 – 928) MHz by using channel selection<br>Peru (917.4 – 927.2) MHz by using channel selection<br>Taiwan (922.600 – 927.2) MHz by using channel selection<br>Open Region (859 – 873) MHz and (915 – 930) MHz<br>(by using channel selection) |
| RF Power | Programmable from 0 dBm to +27 dBm in 0.5 dBm steps |
| RF Antenna | Integrated circular polarized antenna.<br>RF field is confined to avoid reading unwanted tags. |
| Data communications | Ethernet:  IEEE 802.3 up to 100 Mbps<br>Type B USB HID to emulate barcode reader<br>Console USB (USB micro Type-B connector) Maintenance port<br>Ethernet point-to-point over USB (USB micro Type-B connector) |
| Power supply | Power Over Ethernet (PoE)<br>• Supports IEEE 802.3af (Type I) and IEEE 802.3at (Type II)<br>• Power consumption: Class 3<br>• Isolated from Ethernet cable<br>Ratings & Tolerances<br>PSE Type 1: 48 V (- 4 V / +9 V) Maximum power: 15.4 W<br>PSE Type 2: 56 V (- 6 V / +1 V) Maximum power: 30 W<br>On-board battery for RTC chip (CR2032) |
| On-board actuators | Buzzer<br>2 W loudspeaker (only available in CF versions) |
| LED indicators | A three-color LED for indicating the active operation mode |
| Compatibility with software applications | Can be easily integrated with any application software, through keyboard wedge |
| Power consumption | Idle consumption < 2.5 W<br>Default consumption (@10 dBm) < 7 W<br>Maximum consumption (@27 dBm) < 9 W |
| Temperature range | Operating temperature<br>-20 °C to +50 °C<br>Storage temperature<br>-30 °C to +60 °C |
| Dimensions | 180 x 180 x 56 mm (7.09 x 7.09 x 2.20 inches) |
| Weight | 820 g (1.8 lb) |

## Mechanical specifications:



8,04 / 0,316

57,96 / 2,282

143 +0,5 / 0
5,630 +0,02 / 0,00

143 +0,5 / 0
5,630 +0,02 / 0,00

R10 / 0,394

160 / 6,299

180 / 7,087

160 / 6,299

180 / 7,087

Units in millimeters and [inches]

## Product codes for ordering

| ADRD | - | MX | - | A | - | MMM | |
|------|---|----|----|------|---|-----|---|
| | | | | | | | **MX = number of ports** |
| | | M1 | | | | | 1 port |
| | | | | | | | **A = antenna type** |
| | | | | CP11 | | | Confined field antenna |
| | | | | | | | **Model** |
| | | | | | | 70 | Model |

Examples:

### ADRD-M1-CP11-US-70

- AdvanReader -70A
- 1 port
- CP11 antenna
- Frequency band: 902.0 MHz – 928.0 MHz
- Model 70

### ADRD-M1-CP11-EU-70

- AdvanReader -70A
- 1 port
- CP11 antenna
- Frequency band: 865.6 MHz – 867.6 MHz
- Model 70

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