ATR110
2D Barcode Reader with NFC option

Rugged, high-performance, barcode and NFC contactless reader for passes and tickets

Description
The ATR110 is a compact and fast barcode reader with optional NFC contactless capabilities. This ‘one-box’ solution helps process a wide range of electronic ticketing across a variety of media.

The device is designed to read all popular linear, PDF417 and 2D barcode symbologies, including QR and Aztec codes, from smartphones, tablets and printed paper documents. The ATR110’s advanced recognition barcode imager is omnidirectional and has near-zero latency. It captures barcodes within a fraction of a second of presentation in any orientation.

As an option, the device will also support mobile ticketing and mobile wallet payment systems for NFC-enabled smartphones and tablets, as well as reading smartcards, credit cards and debit cards.

This responsive, intuitive-to-use device is designed to be operated by untrained members of the public. Additional user-friendly features include bright LED visual indicators and a programmable audio buzzer to confirm successful data capture.

Its rugged, vibration and shock resistant construction, with no moving parts, enables the reader to withstand years of frontline, public use.

Features
• Fast, intuitive imager with fixed focal distance
• Reads barcodes on face-down presentation
• Reads 2D, PDF417 and linear barcode symbologies
• Contactless NFC mobile ticketing and payment works with all popular contactless cards – including Mifare® (Classic®, Ultralight®), FeliCa®, DESfire® and Calypso®
• RS232 and USB (custom HID, keyboard or CDC serial) interface options
• FLASH upgradeable software
• Configurable LEDs with choice of location (front, rear and both) and audible read confirmation
• Mounting options: desktop; console; pole-mount; and fixed-position kiosk installation.

Applications
• On-board Ticketing including buses, trams and ferries
• Automatic gate and turnstile entry
• Airport check-in, security lanes and boarding gates
• Loyalty programmes
• Self-service kiosk interactions, such as hotel check in
• Payment via virtual storecard and storage of eReceipts
• Real-time, customised marketing promotions.
Specifications

Barcode symbologies read
Linear: EAN, UPC, Code 2 of 5, Interleaved 2 of 5, IATA 2 of 5, Code 39, Code 128
2D: IATA resolution 792, PDF417, Aztec, DataMatrix and QR codes
Media types: Will read: smartphone, tablet and smartwatch displays and paper documents and tickets.
Interface options: Non-NFC version can be single cable USB or Serial

Contactless reader
Supported media: ISO14443 type A and B cards (Java cards); max baud 424K (extendable to 848K)
Mifare UL, Classic 1K, Classic 4K, UL-C, Mifare Plus; max baud 106K
Operating frequency: 13.56 MHz
Operating distance: 20 mm
EMV: Level 1 capable (Approval TBA)
PSAMs: 4 PSAMs; to be accessed via removable panel on underside of unit
Interface: NFC version is USB only. Requires USB power stealer or independent power supply.

Mechanical/Electrical
Dimensions: 81H x 96W x 121D mm
Weight: 443g (without NFC); 573g (with NFC) incl. cables
Power: 5.0 VDC
Current: Barcode Only:
350mA Peak, 250mA Standby
Current: Barcode & NFC:
USB - 350mA Peak, 250mA Standby
Aux - 350mA Peak, 300mA Standby
Colour: Dark grey
MTBF: 85,000 hours

Features
Mounting options: horizontal, vertical and pole
Glass: 3mm thermally toughened low-iron Conturan IK07 (3 times 2J impact) Anti-Reflective coating
Buzzer: loud (75dBa at 1m); volume controllable (config setting – can be adjusted by customer)
Indicator LEDs: 4 colours (green/amber/red/blue)
LED position: Choice of front, rear and both

Environmental
Temperature: Operating -25°C to +50°C
Storage: -30°C to +70°C
Humidity: 95% RH, non-condensing
IP Code: IP54
Vibration: Random vibration using table 2 from ETSI EN 300 019-2-5 V3 2002
Shock: 3 off 30g 6ms half sine shocks in each direction of each axis carried out in accordance with ETSI EN 300 019-2-5 V3 2002, BS EN 60068-2-64:2008
Bump: 100 off 10g 11ms half sine bumps in each direction of each axis carried out in accordance with ETSI EN 300 019-2-5 V3 2002, BS EN 60068-2-64:2008

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