LSR118
2D barcode and NFC/RFID reader/writer

Sealed, rugged, water-resistant device for kiosks, gates, ticket vending machines

Description
The LSR118 is designed to read 2D barcodes from mobile phones, tablets and paper, and read and write to contactless smart cards, NFC labels and NFC-enabled mobile devices – from a single point of presentation.

The reader/writer has a small-footprint, slot-in design to enable fast, easy integration into public access kiosks, gates and ticket machines. Furthermore, its rugged, water-resistant construction, with no moving parts, enables it to withstand years of indoor and outdoor public access use.

2D barcodes
The LSR118 reader’s unique design, with optimised imaging and a 2D omnidirectional barcode imager, ensures read reliability. It also ensures high-speed performance, capturing and decoding all popular linear, PDF417 and 2D symbologies, including QR and Aztec, in less than half a second of presentation in any orientation.

NFC/RFID
NFC offers an especially intuitive and quick interface for data reading and writing.

The LSR118 works with all popular contactless cards – including Mifare® (Classic®, Ultralight®), FeliCa®, DESfire® and Calypso®

Features
• Fully sealed, robust, water-resistant units suitable for integration into indoor or outdoor kiosks, podiums, gates and ticket machines
• Reads both 2D barcodes and NFC cards, labels and devices from one point of presentation
• Quick plug-in design reduces cost of kiosk integration
• Unique optimised focal distance design improves read performance for paper, PDA’s, tablets and smartphones
• Intuitive operation with user feedback (green & red LED lights)
• Works equally well with printed barcodes
• Interfaces as USB composite or serial device, supporting both NFC and barcode readers.

Applications
• Travel and transportation mobile-ticket reading
• Car park ticketing; transportation and event turnstiles and gates
• Redeeming coupons and vouchers; reading loyalty cards.

The LSR118 will read a 2D barcode or NFC tag on a smartphone or contactless smart cards.
NFC technology

NFC (Near Field Communication) is a standard form of communication between an NFC reader and NFC supported media like smartcards, tags and smart phones. NFC technology has gained more popularity as it is increasingly used in passports and mobile devices. The distance of communication is usually a few centimetres such that the users are aware of their contactless media communicating with the reader.

Specifications

2D 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.

Contactless reader

Supported media: ISO14443 type A and B cards (Java cards); max baud 424K (extendable to 848K)
Mifare UL, Classic 1K, Classic 4K, DL-C, DL-EV1, Mifare Plus; max baud 106K, mobile phone (PCE)
Operating frequency: 13.56 MHz
Operating distance: >40mm. 65mm typ.

Interface

USB composite device, with:
- HID interface for barcode reading
- CCID PC/SC interface for NFC
Serial device, with barcode, NFC reader as separate devices

Mechanical/electrical

Dimensions: 67H x 106W x 110D mm
Weight: 250 g excluding cable
Power: Via external 5v power supply
Current: Peak: 650mA
Body: Black ABS
Glass: 4mm Toughened White Soda Lime; BS EN60068-2-75 & IEC 62262:2002, rated to 3.5J impact
MTBF: 250,000 hours

Environmental

Temperature:
- Operating: -25°C to +50°C
- Storage: -30°C to +70°C
Humidity: 95% RH, non-condensing
Resilience:
- Water-resistant to 1m depth
- Dust-proof
EMC Approvals:
- FCC Part 15 Subpart C
- CE: EN 301 489-1 v1.8.1 (2008-04)
- CE: EN 302 291-1 v1.1.1 (2005-07)
Safety:
- IEC 62471: 2006 - Exempt Class
- EN 60950-1:2006+A12:2011
Ingress:
- IP67 certified to BS EN 60529:1992

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