LSR116
2D Barcode Reader for Kiosks and Gates

Sealed, rugged, water-resistant 2D barcode reader

Description

The LSR116 is designed to read 2D barcode images from smartphones, tablets or paper. Its unique design, with optimised imaging and a 2D omnidirectional barcode imager, ensures read reliability. It also ensures high-speed performance, capturing and decoding barcodes in less than one second of presentation in any orientation.

The LSR116 imager reads all popular linear, PDF417 and 2D symbologies, including postal barcodes.

It has a small-footprint slot-in design to enable fast easy integration into third-party public access kiosks and gates. Furthermore, its rugged, water-resistant construction with no moving parts, enable it to withstand years of indoor and outdoor public access use.

The LSR116 may be configured with data format settings. Serial RS232 and serial or keyboard USB interface versions are available. When operated in interactive mode, the LSR116 can be controlled by the host application to give green light LED "successful read" feedback to the user.

LSR116 reading a 2D barcode from a smartphone

Features

- Fully sealed, robust, water-resistant units suitable, for integration into indoor or outdoor kiosks, podiums and gates
- Quick plug-in design reduces cost of kiosk integration
- Unique optimised focal distance design improves read performance for paper, PDA's, tablets, smartphones, mobile handsets
- Intuitive operation with user feedback (Green & Red LED lights)
- Reads on face-down presentation of a barcode
- Reads 2D, PDF417 and linear symbologies
- Works equally well with printed barcodes
- Single interchangable cable connection to host PC
- RS232 and USB (serial or keyboard) interface options
- FLASH upgradeable software
- Interactive mode allows host application to control reader functions
- Fully configurable via detachable host interface

Applications

- Integration into public-use kiosks and gates
- Travel and transportation mobile-ticket reading
- Retail voucher redemption & loyalty cards
- Car park ticketing, turnstiles & automatic gates

Access 2D barcode reader integrated into an automatic gate

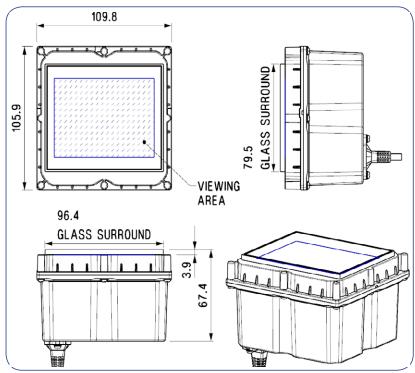## Access IS
Interfacing Solutions

Barcode Symbologies

The LSR116 reads all 2D PDF417, 2D stacked and 2D symbology codes.

Pixel based 2D barcodes, such as the QR symbology, are ideal for downloading to a smartphone display. The QR format consists of a square grid with three defined corners, which enables it to be quickly and easily read in any orientation.

In addition, 2D barcodes can store up to 4,296 alphanumeric characters of information. This can include encoded error-correction data strings, to make barcodes still readable, even when part of the code is destroyed or marked.

Dimensioned diagram of the LSR116

Common Linear Barcodes

These include EAN / UPC, Interleaved 2 of 5, Industrial 2 of 5, IATA 2 of 5, Code 39 and Code 128 formats.

PDF417

A 2D stacked barcode commonly used in transport and ID. The example below contains the Access address.

QR

A 2D matrix-style barcode containing up to 3,832 characters. The barcode below contains sample airline boarding details.

LSR116 2D Barcode Reader Specifications

Reads following symbologies

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

Performance: Will read 2D barcodes from paper, mobile phone and tablets

Interface

Interface options: RS232 via DB9 connector; USB (HID, serial or keyboard emulation); model exists to offer interchangable USB and serial connectivity

Mechanical/electrical

Dimensions:
68H x 106W x 110D mm

Weight: 250 g excluding cable

Power (serial interface): 4.5 to 5.0 VDC via Access supplied external power supply or via USB power stealer

Power (USB interface): Via a single USB cable for combined data and power

Current Typical: 310 mA
Peak: 480 mA

Body: Black ABS

Glass: 4mm Toughened White Soda Lime; BS EN60068-2-75 & IEC 62262:2002, rated to 3.5J impact

MTBF: 85,000 hours

Environmental

Temperature:
Operating -25°C to +50°C
Storage -30°C to +70°C

Resilience:
Water-resistant to 1m depth
Dust-proof

EMC Approvals:
FCC 47CFR Part 15 Class A

EN55022: 2006 + Amd1: 2007; EN55024: 1998 + Amd1: 2001 + Amd2 2003

UL 60950-1 and CSA C22.2 No. 60950-1-07

IEC 60950-1 2nd edition
IEC 60950-1 2nd edition including amendment 1

Safety
EN 60950-1: 2006
IEC 62471: 2006

Ingress:
IP67 certified to BS EN 60529:1992

Ver: 1.4 April 2013

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