



AV900™ – HIGH PERFORMANCE 2D READER

The AV900 is the innovative 2D image-based reader setting a new paradigm for logistic applications with high speed transportation systems on all conveyor sizes, airport baggage handling systems, as well as static reading applications.

With the very high resolution 9 MP sensor, dynamic or adjustable focus, and multiple lens options, the AV900 reader creates a new optical standard for unattended data capture solutions. Continuous frame acquisition, no-flashing white or red integrated illumination, and colored spot indicators make AV900 reader the unprecedented solution for operator attended applications, as manual object presentation in overhead scanning mode or manual conveyor loading.

ENHANCED SOFTWARE FEATURES

PackTrack™ capability allows the AV900 to minimize the gap between objects and increase the system productivity. FPGA hardware acceleration for real time image elaboration. Captured images are stored on-board and optionally transferred to external supports through the integrated Gigabit Ethernet connectivity.

EASY INTEGRATION

Installation and configuration are made easy with multi-language, browser based, on board HTML web server interface e-GENIUS™ as well as X-Press™ setup interface and integrated aiming lasers. Fully compatible with WebSentinel™ PLUS for real time performance monitoring.

The AV900 reader interfaces directly to PROFINET or Ethernet IP enabled PLC's with two Ethernet TCP/IP and two serial communication interfaces. SyncNet™ Technology with Master/Slave allows enables a simplified way to network multiple devices in a solution with a single interface. A dedicated high-speed image saving port further enhances the integration in any data capture solution.

RUGGED INSIDE AND OUT

Rugged metal enclosures with an IP65 rating. All metal integrated illumination housing that can withstand dialing cleaning with harsh cleaners. Active cooling to maintain optimal processor performance with an operating temperature up to 50 °C, guarantees a long-life cycle in the harshest industrial environments.

FEATURES

- 9 MP image sensor, up to 32 FPS
- Patented dynamic or adjustable focus system offering extended depth of field
- Continuous, no-flashing white or red illumination
- Region Of Interest Windowing for higher frame rate
- Next generation decode algorithm for outstanding decoding capability on 1D, 2D, Stacked, or Postal symbologies
- Gigabyte Ethernet and SyncNet high speed connectivity
- PackTrack capability for closer item spacing
- Multiple format image saving from full definition to a highly compressed .jpg
- Datalogic's patented 'Green Spot' technology for visual good-read feedback
- Dual laser aiming for ease of installation
- e-GENIUS browser based interface compatible with any kind of operating system and hardware platform including PC's and Tablet
- Extreme Industrial grade: IP65 for harsh environments with 0 to 50 °C / 32 to 122 °F operating temperatures

INDUSTRY - APPLICATION

Transportation & Logistics:

- Automated sorting
- Manual sorting
- Dimension Weigh Scan System
- Non conveyable Auto dimension systems
- Carton and tote traceability
- OCR and Videocoding
- Extended ID and image saving

Distribution and Retail:

- Order fulfillment and verification
- Multimedia sorting
- Reverse Logistics process

Airports:

- Baggage handling systems
- Automated tag reading

TECHNICAL SPECIFICATIONS

OPTICAL FEATURES

Sensor Type	CMOS, 9 MPixels
Frame Rate	Up to 32 frames/sec
Optical Lens	25 mm, 35 mm C-Mount lens
Focus System	Dynamic, Sequential, SW Adjustable
Illumination	Integrated Red or White

DECODING CAPABILITY

1D and Stacked Codes	Code 128 (GS1-128); Code 39 (Standard and Full ASCII); Code 32 - MSI; Standard 2 of 5; Matrix 2 of 5; Interleaved 2 of 5; Codabar; Code 93 - Pharmacode; EAN-8/13 - UPC-A/E (including Addon 2 and Addon 5); GS1 DataBar Family; PDF417 (Standard and Micro PDF417)
2D Codes	Data Matrix ECC 200 (Standard, GS1 and Direct Marking); QR Code (Standard and Direct Marking); MicroQR Code; Maxicode
Postal Codes	Aztec Code Postal; Australia Post; Royal Mail 4 State Customer; Kix Code; Japan Post; PLANET; POSTNET; POSTNET (+BB); Intelligent Mail; Swedish Post

SYSTEM

Memory	System RAM: 8 GB; eMMC Flash: 32 GB
Microprocessor	Intel Pentium Quad-core
Operating System	Linux
Real-Time Clock	Time and date stamping under software control or can be synchronized with time server

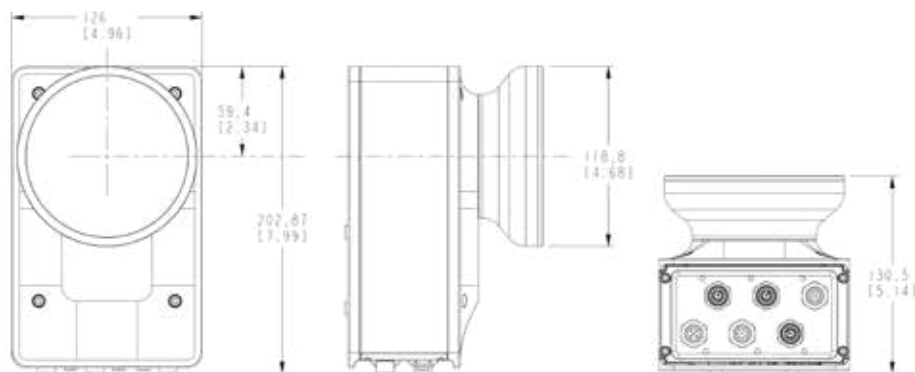
COMMUNICATIONS INTERFACE

Communication Interfaces	2 Ethernet TCP/IP, 2 serial communication interfaces
Internal Communication System	SyncNet Technology
Connectivity Modes	Master/Slave, Ethernet Point to Point
Programming Method	e-GENIUS multi-language, browser based, on board HTML web server interface

MODELS

PART NUMBER	MODEL AND DESCRIPTION
938000105	AV900-257W; 25 mm, f/7, WHITE
938000115	AV900-257R; 25 mm, f/7, RED
938000102	AV900-358W; 35 mm, f/8, WHITE
938000112	AV900-358R; 35 mm, f/8, RED

MECHANICAL DRAWINGS



ELECTRICAL

Supply Voltage	24 VDC +/- 20%
Power Consumption	2A

PHYSICAL CHARACTERISTICS

Dimensions	20.0 x 12.6 x 13.0 cm / 7.8 x 4.9 x 5.1 in
Weight	2,900 g / 6.4 pounds
Chassis Material	A380 Die Cast Aluminum

ENVIRONMENTAL

Humidity	95% non condensing
Protection Class	IP65
Vibration Resistance	SINE vibration as per EN60068-2-6 10-50 Hz: 0.4mm / 50-500 Hz: 2g 2h on all axis
Shock Resistance	EN60068-2-27, 15 g / 11 ms / 3 times up and 3 times down on the primary axis.
Fan Life	L10 @ 40 degrees C: 50,000 hours
Temperature	Operating: 0 to 50 °C / 32 to 122 °F Storage/Transport: -20 to 70 °C / -4 to 158 °F

SAFETY & REGULATORY

Agency Approvals	The product meets necessary safety and regulatory approvals for its intended use.
Environmental Compliance	Complies to EU RoHS
Regulatory	EN55032 Emissions for Class A digital device; EN61000-6-2 Electromagnetic Compatibility; FCC part 15 for Class A digital device; cULus listed product for Canada and U.S.; CE
Laser Safety	Class 2 laser product as per IEC60825-1:2014 Complies with 21 CFR 1040
LED Safety	LED Safety (Risk Group 0) as per IEC62471

WARRANTY

Warranty	2-Year Factory Warranty
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