

# AV500™



## AV500™ – HIGH PERFORMANCE 2D READER

The AV500 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 a high resolution 5 MP sensor, image acquisition at 32 frames per second, dynamic or adjustable focus, and multiple lens options, the AV500 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 AV500 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 AV500 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 AV500 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 hash 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

- 5 MP image sensor, 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

<b>Sensor Type</b>	CMOS, 5 MPixels
<b>Frame Rate</b>	Up to 32 frames/sec
<b>Optical Lens</b>	16 mm, 25 mm, 35 mm C-Mount lens
<b>Focus</b>	Fixed, adjustable, dual zone and dynamic
<b>Illumination</b>	Integrated Red or White

## DECODING CAPABILITY

<b>1D and Stacked Codes</b>	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)
<b>2D Codes</b>	Data Matrix ECC 200 (Standard, GS1 and Direct Marking); QR Code (Standard and Direct Marking); MicroQR Code; Maxicode
<b>Postal Codes</b>	Aztec Code Postal; Australia Post; Royal Mail 4 State Customer; Kix Code; Japan Post; PLANET; POSTNET; POSTNET (+BB); Intelligent Mail; Swedish Post

## SYSTEM

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

## COMMUNICATIONS INTERFACE

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

## ELECTRICAL

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

## PHYSICAL CHARACTERISTICS

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

## ENVIRONMENTAL

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

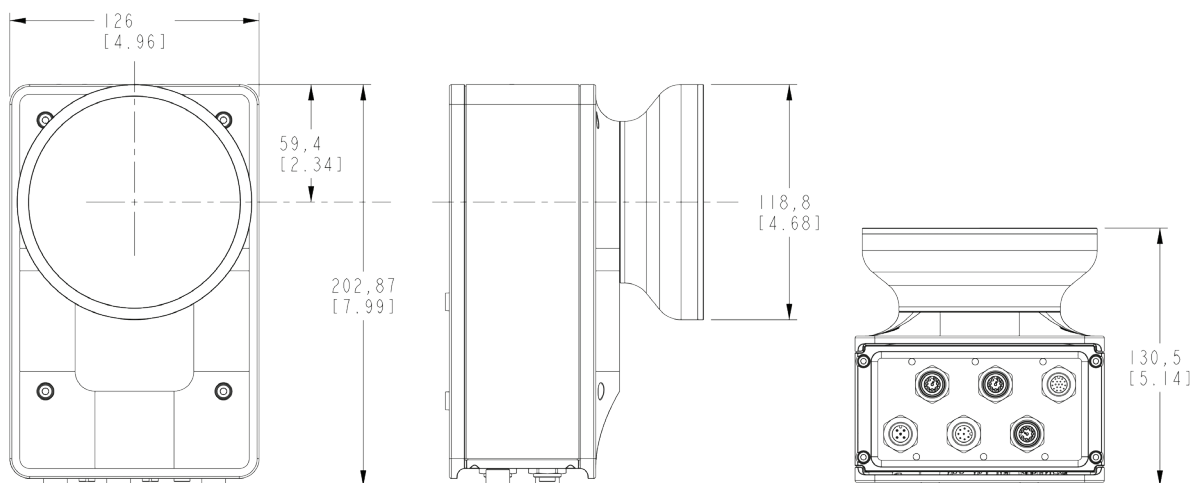
## SAFETY &amp; REGULATORY

<b>Agency Approvals</b>	The product meets necessary safety and regulatory approvals for its intended use.
<b>Environmental Compliance</b>	Complies to EU RoHS
<b>Regulatory</b>	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
<b>Laser Safety</b>	Class 2 laser product as per IEC60825-1:2014 Complies with 21 CFR 1040
<b>LED Safety</b>	LED Safety (Risk Group 0) as per IEC62471

## WARRANTY

<b>Warranty</b>	2-Year Factory Warranty
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# MECHANICAL DRAWINGS



## MODELS AND ACCESSORIES

	ORDER NUMBER	DESCRIPTION
<b>Reader With Mount</b>	938000007	AV500-166W, 16mm, f/6, WHITE
	938000005	AV500-257W, 25mm, f/7, WHITE
	938000006	AV500-258W, 25mm, f/8, WHITE
	938000001	AV500-357W, 35mm, f/7, WHITE
	938000002	AV500-358W, 35mm, f/8, WHITE
	938000017	AV500-166R, 16mm, f/6, RED
	938000015	AV500-257R, 25mm, f/7, RED
	938000016	AV500-258R, 25mm, f/8, RED
	938000011	AV500-357R, 35mm, f/7, RED
	938000012	AV500-358R, 35mm, f/8, RED