**MATRIX 450™**

MATRIX 450™ is the high-end industrial 2D reader designed for logistic applications. Through 5 million pixels captured 15 times in a second, MATRIX 450™ enables a range of applications never covered before by a 2D-Imager. MATRIX 450™ perfectly meets the requirements of both automated and manual material handling. Thanks to the extraordinary acquisition rate at very high resolution and the strong illuminator, it is the perfect solution for high speed transportation on small and middle size conveyors. With Matrix 450™ multiple reading attempts are no longer needed: the large area coverage in a single shot permits the highest throughput and maximum ease of use. Some additional features - continuous frame acquisition, no-flashing white illumination, colored spot indicators - actually make MATRIX 450™ the unprecedented solution for operator attended applications, as manual object presentation in overhead scanning mode or manual conveyor loading. The ID-NET™ readers clustering permits to effectively extend the reading area for single-side and multi-side applications. Captured image are stored on-board and optionally transferred to external supports through the integrated Gigabit Ethernet connectivity. No moving parts, rugged metal construction, IP65 enclosure rate and operative temperature up to 50°C guarantee a long life cycle even in harsh industrial environments.

**HIGHLIGHTS**

- 5MP image sensor, 15 FPS
- Gigabit Ethernet Integrated Connectivity
- Adjustable focus through C-Mount lenses
- White and Blue lighting options
- Continuous, no-flashing Lighting
- Colored spot indicators
- Outstanding decoding capability on 1D, 2D, Stacked, Postal symbologies
- Region Of Interest Windowing for higher frame rate
- Blue Diamonds™ aiming and focusing system
- X-PRESS™ for easy and intuitive setup
- ID-NET™ embedded high speed connectivity

**APPLICATIONS**

Transportation & Logistic
- Automated sorting
- Manual Postal sorting

Distribution and Retail
- Order fulfillment and verification
- Multimedia sorting
- Reverse Logistics process
### TECHNICAL DATA

#### PHYSICAL CHARACTERISTICS
- **DIMENSIONS**: 170 x 200 x 150 mm – 6.7 x 8.9 x 5.9 inches
- **WEIGHT**: 3000 g – 6.6 pounds (with lens)
- **CASE MATERIAL**: Aluminum
- **OPERATING TEMPERATURE**: 0 to 50 °C (32 to 122 °F)
- **STORAGE TEMPERATURE**: -20 to 70 °C (-4 to 158 °F)
- **HUMIDITY**: 90% non condensing
- **PROTECTION CLASS**: IP65

#### PERFORMANCE
- **OPTICAL FEATURES**: 2448 x 2050
  - **CCD sensor**
- **FRAME RATE**: 15 frames/s
- **READING ANGLES**: Max. Pitch: ± 35°; Tilt: 0-360°
- **READABLE SYMBOLS**: 1D and Stacked: IL 2/5, Code 128, Code 39, EAN/UPC, PDF417, Micro-PDF417, Pharmacode, GS1 DataBar (RSS) family, and many more.
  - **2D**: Data Matrix, QR Code, Micro QR, Maxicode, Aztec, Microglyph
- **COMMUNICATION INTERFACE**: RS232 + RS232/RS422/RS485 up to 115.2 Kbit/s
  - **Ethernet**: IEEE 802.3z 1000BaseT compliant
  - **ID-NET™**: port up to 1 Mbps
- **CONNECTIVITY MODES**: Pass Through, Master/Slave, Multiplexer, Ethernet point to point
- **DIGITAL INPUTS**: Two SW programmable, optocoupled and polarity insensitive
- **DIGITAL OUTPUTS**: Two SW programmable, optocoupled
- **PROGRAMMING METHOD**: X-PRESS™ Human Machine Interface
  - **Windows™** based SW (VisiSet™) via serial or Ethernet link
- **USER INTERFACE**: X-PRESS™ Human Machine Interface
  - **Beeper**, Programmable Push Button, LEDs (Status, Com, Trigger, Good, Ready, Power on, Network presence, Good read Spot)

#### ELECTRICAL CHARACTERISTICS
- **POWER SUPPLY**: 24 Vdc±20%
- **POWER CONSUMPTION**: 2,5 A (0,5A Matrix 450, 2A LT-03x)

#### MODELS & ACCESSORIES

<table>
<thead>
<tr>
<th>Order No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>937400024</td>
<td>MATRIX 450 800-030 5MP GIGE</td>
</tr>
<tr>
<td>93A400032</td>
<td>LT-030 ULTRA POWER LT supernarrow blue</td>
</tr>
<tr>
<td>93A400033</td>
<td>LT-031 ULTRA POWER LT SUPERNARROW WHITE</td>
</tr>
<tr>
<td>93A400034</td>
<td>LT-032 ULTRA POWER LT NARROW BLUE</td>
</tr>
<tr>
<td>93ACC0041</td>
<td>LNS-1216 16MM C-MOUNT LENS 5MP</td>
</tr>
<tr>
<td>93ACC0034</td>
<td>LNS-1225 25MM C-MOUNT LENS 5MP</td>
</tr>
<tr>
<td>93ACC0035</td>
<td>LNS-1235 35MM C-MOUNT LENS 5MP</td>
</tr>
<tr>
<td>93ACC0036</td>
<td>LNS-1250 50MM C-MOUNT LENS 5MP</td>
</tr>
<tr>
<td>93A050032</td>
<td>CAB-LD-002 LT DRIVER + PWR 0.2M</td>
</tr>
<tr>
<td>93A050044</td>
<td>CAB-LD-102 LT DRIVER NO PWR 0.2M</td>
</tr>
<tr>
<td>93A050033</td>
<td>CAB-LP-03 LIGHTING POWER 3M</td>
</tr>
<tr>
<td>93A050037</td>
<td>CAB-LP-05 LIGHTING POWER 5M</td>
</tr>
<tr>
<td>93A050034</td>
<td>CAB-GE01 M12-IPE67 TO RJ45 1M</td>
</tr>
<tr>
<td>93A050035</td>
<td>CAB-GE03 M12-IPE67 TO RJ45 3M</td>
</tr>
<tr>
<td>93A050036</td>
<td>CAB-GE05 M12-IPE67 TO RJ45 5M</td>
</tr>
<tr>
<td>93A050043</td>
<td>CAB-PG-0105 VDC PWR PG120-M450 5M</td>
</tr>
<tr>
<td>93ACC1870</td>
<td>CAB-PG-0002 VDC PWR PG120-IDNET 2M</td>
</tr>
<tr>
<td>93ACC0046</td>
<td>PG-120-K01 PWR SUPPLY KIT FOR M450 (EU)</td>
</tr>
<tr>
<td>93ACC0047</td>
<td>PG-120-K02 PWR SUPPLY KIT FOR M450 (UK)</td>
</tr>
<tr>
<td>93ACC0048</td>
<td>PG-120-K03 PWR SUPPLY KIT FOR M450 (US)</td>
</tr>
</tbody>
</table>

Product and Company names and logos referenced may be either trademarks or registered trademarks of their respective companies. We reserve the right to make modifications and improvements.