

# Blade



## Cutting edge traceability with Blade, revolutionary compact 1D reader



Blade Series is the new generation of Compact Industrial 1D Readers designed for lean integration, simple installation and reduced maintenance.

Blade represent the R-Evolution of heroic DS2X000 Series:

- Revolution: Blade is adopting Imaging technology (no laser, no moving parts, all electronics) ensuring maximum reading performances over 1D barcodes and unsurpassed reliability.
- Evolution: Blade is fully backward compatible in terms of mechanical installation and reading coverage (distance, barcode resolution, connectivity) with DS2x00.

Blade models provide ready-to-use, cutting edge solutions supporting a variety of Traceability applications in OEM, Factory and Warehousing Automation, whenever 1D barcodes are in use.

Main Sub-Industry targets are Packaging (Pharma, Food & Beverage) and Intralogistics (Warehouse Automation and general Intralogistics).

Main applications: Tote Routing, primary and secondary packaging traceability, end of line traceability/sorting. The Series is made of two product versions, Blade 100 and Blade 200, offering increasing reading power and flexibility to efficiently match different application needs.



## HIGHLIGHTS

### POWER OF IMAGING

- Camera sensor 2000 x 128 pixels and innovative lighting system
- Improved reliability, increased reading performances on poor quality labels and 50% reduction of models

### LEAN INTEGRATION

- Small size, various fixing points and embedded flexibility allows different positions and orientations
- Smooth transition from DS2X00 to Blade ensured through same mechanical dimensions, positioning and performance

### SIMPLE INSTALLATION: FIX-PLUG-GO

- **FIX** is easy, every needed position/angle is supported by multiple fixing point
- **PLUG** M12 connectors for both I/O and Networking. Three options available: single port TCP/IP ETHERNET plus Legacy RS-232, Double PORT PROFINET and Double Port ETHERNET/IP
- **GO**: switch on and BLADE is ready to start. No image calibration needed. Blade is configured via DL.CODE, the standard tool for Matrix Series

### REDUCED MAINTENANCE

- Elimination of moving parts: full electronics components will improve product lifetime and reduce total cost of ownership
- In case of replacement configuration backup/restore is available both over the Network and locally via the new MicroSDCard slot
- Complete Monitoring options are offered: embedded WebMonitor (same as Matrix Series) freely accessible and connection to WebSentinel Plus ecosystem

## APPLICATIONS

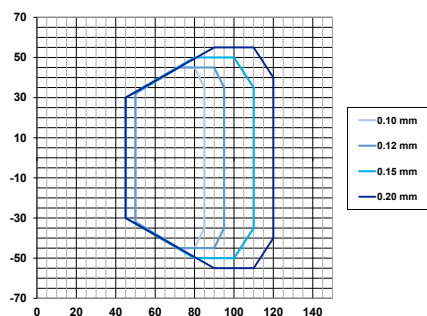
- Automatic warehouses
- General intralogistics
- Tote routing
- Factory automation
- Automatic picking systems
- Process control and packaging traceability (Pharma, Food & Beverage)
- Print & Apply systems
- End of line traceability/sorting

# TECHNICAL DATA

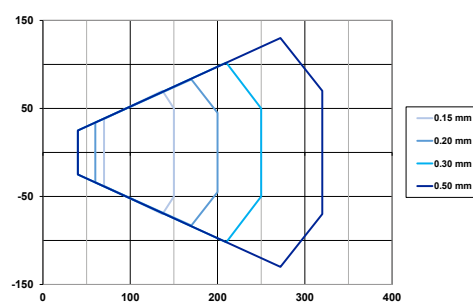
| COMPACT INDUSTRIAL 1D READERS     | BLADE 100   |   | BLADE 200  |   |
|-----------------------------------|---|---|--|---|
|                                   | -X1XX MODELS  | -X2XX & -X3XX MODELS  | -X1XX MODELS   | -X2XX & -X3XX MODELS  |
| Reading Distance (Min / Max)      | 40 - 320 mm / 1.57 - 12.6 in  |   | 40 - 600 mm / 1.57 - 23.62 in  |   |
| Max Resolution                    | up to 0.1 mm (3.94 mils)  |   |  |   |
| Frame Rate                        | 270 frames per second   |   |  |   |
| Aperture Angle                    | 47°   |   |  |   |
| Readable Codes                    | Code 12 of 5, Code 39, Code 93, Code 128, EAN/UPC, GS1 128 (EAN 128), Codabar, Pharmacode, Plessey, ISBT128 |   |  |   |
| Case Material                     | Aluminum  |   |  |   |
| Dimensions (Typical Value)        | 104 x 68.5 x 38.5 mm<br>(conn .0°)  | 104 x 86 x 38.5 mm<br>(conn .0°)  | 104 x 68.5 x 38.5 mm<br>(conn .0°)   | 104 x 86 x 38.5 mm<br>(conn .0°)  |
| Weight                            | 310 g / 10.93 oz  |   |  |   |
| Temperature Range                 | 0° - 50 °C / 32 - 122 °F  |   |  |   |
| Max Power Consumption             | 4.5 W   |   | 5.5 W  |   |
| Voltage Supply/Power Consumption  | 10-30 VDC   |   |  |   |
| IP Rating                         | IP65  |   |  |   |
| Embedded Communication Interfaces | Ethernet TCP/IP<br>Main port RS-232<br>Auxiliary port RS-232  | Dual Port Profinet,<br>conformance Class B<br>(-X3XX) or Dual Port<br>Ethernet-IP (-X2XX) | Ethernet TCP/IP<br>Main port RS-232/RS-422/<br>RS-485<br>Auxiliary port RS-232 | Dual Port Profinet,<br>conformance Class B<br>(-X3XX) or Dual Port<br>Ethernet-IP (-X2XX) |
| Digital Inputs                    | 2 Inputs<br>(optocoupled, NPN/PNP)  | 1 Input<br>(optocoupled, NPN/PNP)   | 2 Inputs<br>(optocoupled, NPN/PNP)   | 1 Input<br>(optocoupled, NPN/PNP)   |
| Digital Outputs                   | 2 Outputs   |   | 2 Outputs  |   |
| Id-Net™ Interface                 | ✓   |   | ✓  |   |
| Xpress Interface™                 | ✓   |   |  |   |
| Device Programming                | DL.Code   |   |  |   |

## READING DIAGRAMS

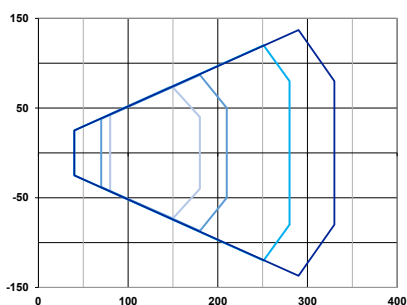
Blade 100 - 2XXX



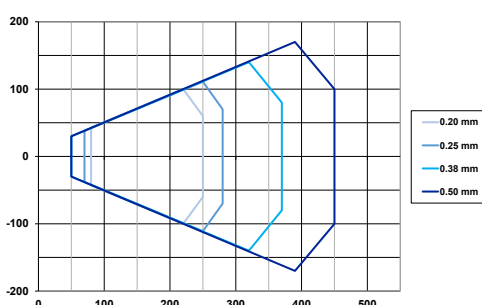
Blade 100 - 1XXX



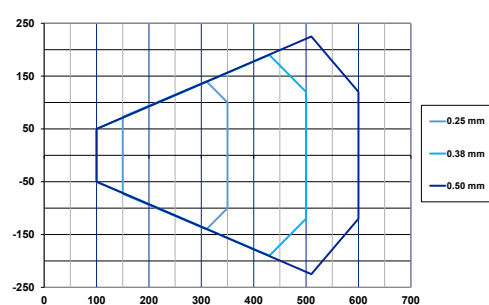
Blade 200 - 1XXX - focus=near



Blade 200 - 1XXX - focus=mid

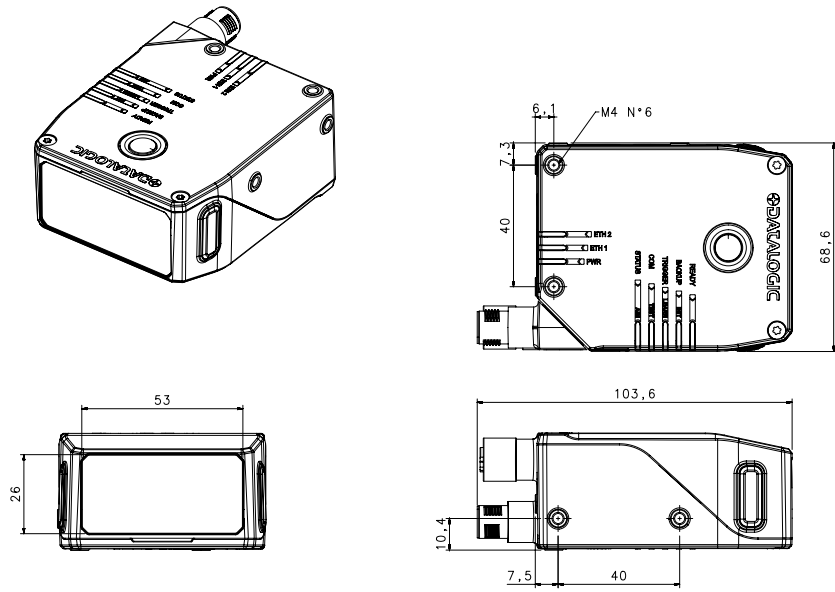


Blade 200 - 1XXX - focus=far

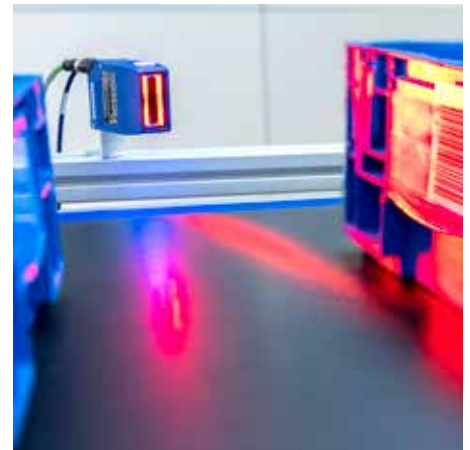
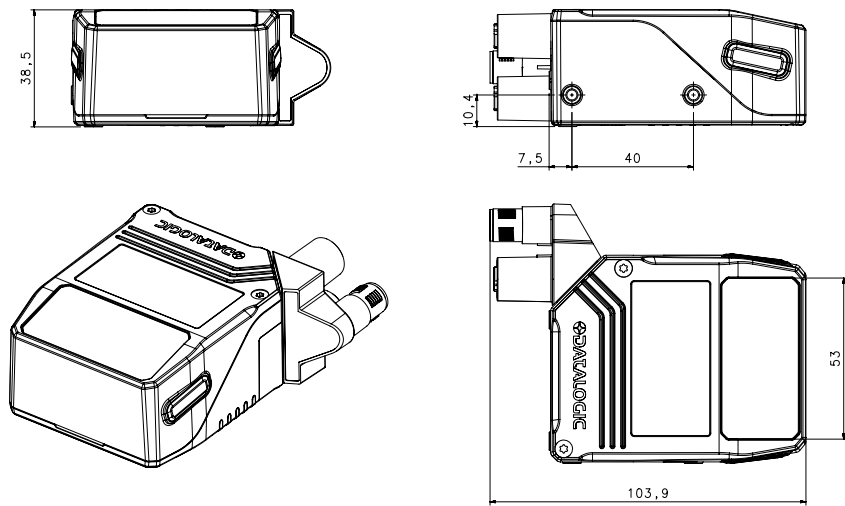


# DIMENSIONS

BLADE 100 - 200  
ETHERNET SINGLE PORT  
FRONT WINDOW



BLADE 100 - 200  
PROFINET ETH-IP DOUBLE PORT  
SIDE WINDOW



# MODELS AND ACCESSORIES

| PART NUMBER     | DESCRIPTION                     |
|-----------------|---------------------------------|
| STANDARD MODELS |                                 |
| 930190001       | BLADE 100 2100 HI-RES ETH FRONT |
| 930190002       | BLADE 100 1100 ETH FRONT        |
| 930190003       | BLADE 100 1101 ETH SIDE         |
| 930190004       | BLADE 100 1201 ETH-IP SIDE      |
| 930190005       | BLADE 100 1301 PNET SIDE        |
| 930190007       | BLADE 200 1100 ETH FRONT        |
| 930190008       | BLADE 200 1101 ETH SIDE         |
| 930190009       | BLADE 200 1200 ETH-IP FRONT     |
| 930190010       | BLADE 200 1201 ETH-IP SIDE      |
| 930190011       | BLADE 200 1300 PNET FRONT       |
| 930190012       | BLADE 200 1301 PNET SIDE        |
| ACCESSORIES     |                                 |
| 93ACC0439       | BLADE L-SHAPE BRACKET (5 PCS.)  |
| 90ACC0520       | MicroSD Card - 8G - SIS - Blank |

