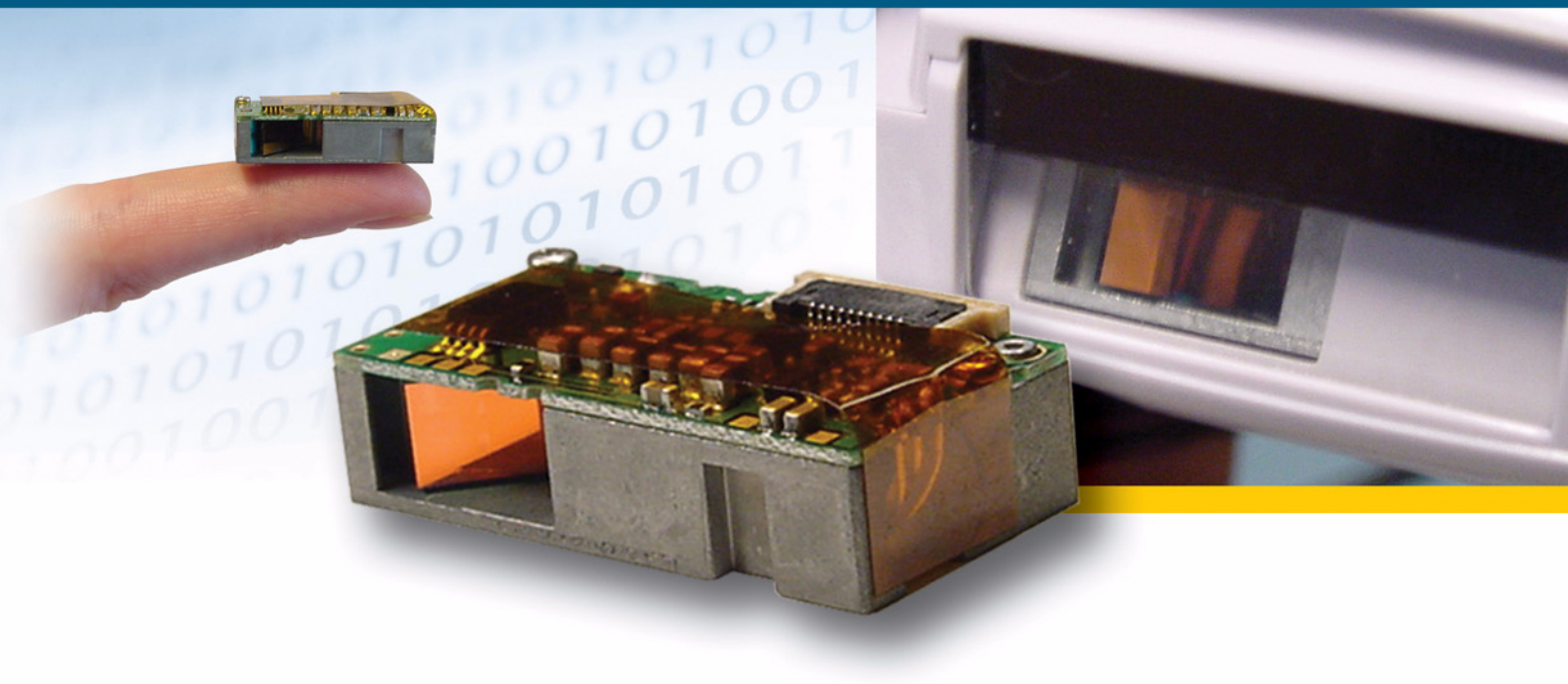
The VLM 4100 module can be used in PDA's, mobile data collectors, or in other custom applications that requires barcode reading, where the laser module can be integrated in the existing device. After the implementation in the housing the definition laser class 1 of the module remains his validity, so further special protective measurement for the laser are not needed for normal use.

1D Laser module

VLM 4100

Barcode scanner laser module



Features

- Laser scan engine
- Classification I laser product
- Small sized (< 2cm) with low energy
- Programmable filter for signal improvement

Benefits

- Enables touch- and variable distance reading
- Optimal safety for eyes provided
- Perfect suitable for integration in mobile devices
- Can read both high density and/or Dot-Matrix labels

Cabled Wireless Stationary **OEM**

OPTICON
always scanning for new ID's

Specifications

VLM 4100 Laser module

Electrical specifications

Voltage requirement	3.1 ~ 3.6 V
Current concumption	35 mA (typical use)

Optical specifications

Light source	650 nm visible laser diode
Scan rate	100 scans/sec
Decode rate	100 decodes/sec
Reading angle	54°, effective 44°
Reading pitch angle	± 35°
Reading skew angle	+8 - +50°, -8 - -50°
Reading tilt angle	± 20°
Curvature	R>15 (at EAN8), R>20 (at EAN13)
Min. PCS value	0.45
Depth of field	70 ~ 450 mm (UPC PCS0.9, resolution 1.00), 50 ~ 200 mm (UPC PCS0.9, resolution 0.50), 50 ~ 190 mm (UPC PCS0.9, resolution 0.25), 50 ~ 100 mm (UPC PCS0.9, resolution 0.15), 60 ~ 90 mm (UPC PCS0.9, resolution 0.127)

Environmental specifications

Temperature in operation	-10 - +50 °C
Temperature in storage	-30 - +60 °C
Humidity in operation	5 - 90 % (non condensing)
Humidity in storage	5 - 90 % (non condensing)
Ambient fluorescent light rejection	4.000 lux max.
Ambient white light rejection	4.000 lux max.
Ambient direct sun light rejection	80.000 lux max.
Shock drop test	1.8 m drop onto concrete surface with dummy case
Shock vibration test	12 - 100 Hz with 2G for 30 min, cycle for X,Y,Z
MTBF	30000 hours except laser diode and scanning mechanism, 10000 hours for laser diode, 10000 hours for scanning mechanism, under normal conditions

Physical specifications

Dimensions	(L x B x H) 25 x 14 x 8 mm
Weight body	max. 9 g

Regulatory

Laser safety class	IEC825, Class I laserproduct
EMC	EN 55022, EN 55024

Note:
Opticon modules are manufactured for third parties on request. Contact Opticon for the conditions.

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