



## 2D-Vision-Code-Reader

# ELCR 4840

**Stand-alone complete code & character reader**  
**High speed camera up to 100 fps**  
**Integrated LED illumination and optic**  
**Intuitive graphical development environment**

### Principal features:

640 x 480 pixel  
 Operating distance adjustable  
 from 60 to 200 mm +/-10 mm  
 (26 x 26 mm to 118 x 88 mm  
 detection range)  
 Stand-alone  
 Illumination integrated  
 Integrated objective  
 Code reading in 360°  
 2 digital input  
 3 digital output  
 1 analogue output for  
 external illumination  
 RS 232/485 interface  
 10/100 Mbps ethernet  
 interface  
 Easy handling on graphic  
 programming via Windows  
 ☺

### Typical applications:

1D/2D barcode reading  
 Data-Matrix ECC 200  
 code reading  
 RSS codes  
 Postal codes  
 EAN/UPC codes  
 360° reading  
 Reads on paper, plastic,  
 textile, aluminium

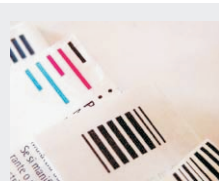
## Description

### ELCR 4840 2D-Vision-Code-Reader

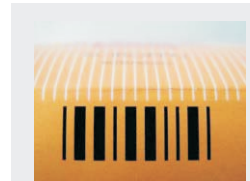
**Detection of 1D/2D Barcode, Data-Matrix ECC 200  
 and RSS codes**

With a working range of 100 mm and a detection window of  
 48 x 40 mm the ELCR 4840 will detect OCR/OCV and barcode  
 in 360°. The code can be transferred via serial interface or  
 10/100 Mbps ethernet interface.

## Possible codes



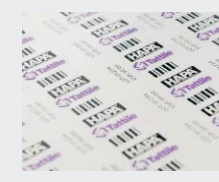
Leaflet Barcode



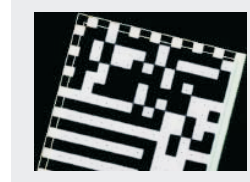
Coston Barcode



Label Barcode



Aluminium Barcode



2D Code Data-Matrix



2D Code RSS Type

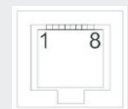
## Wiring connections

Pin Signal  
 1 (+) 24 V supply  
 2 GND supply  
 3 TxA  
 4 RxA  
 5 CTS  
 6 GND serial  
 7 RS485 A  
 8 RS485 B  
 9 + 24 V IN and OUT  
 10 Input 0  
 11 Input 1  
 12 Output 0  
 13 Output 1  
 14 Output 2  
 15 GND I/O

**D-Sub  
 15-pin female**



**Ethernet  
 RJ45  
 8-pin female**

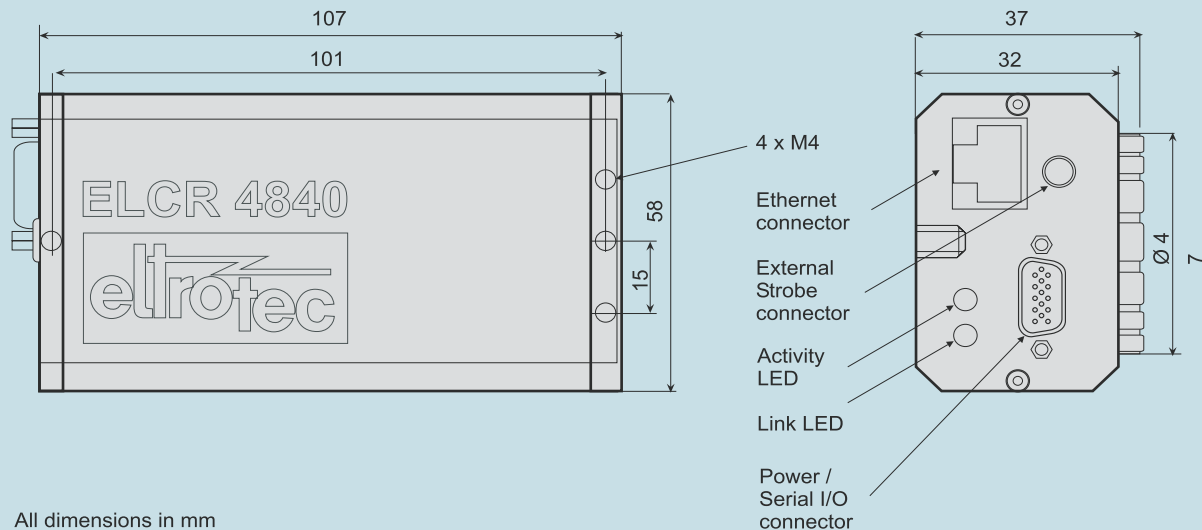


Pin Signal  
 1 TX +  
 2 Tx -  
 3 Rx +  
 4 n.c.  
 5 n.c.  
 6 Rx -  
 7 n.c.  
 8 n.c.

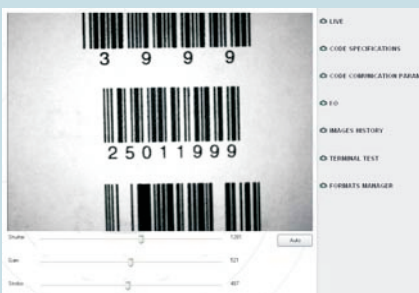
## Technical data

<b>Electrical data</b>	Supply voltage	24 VDC, +/- 10 % ripple
	Power consumption	typ. 3W
<b>Data on ambient conditions</b>	Operating temperature	- 10 °C to +50 °C
	Humidity	10 % to 90 % (not condensing)
<b>Camera</b>	Number of pixel	640 x 480
	Chip size	1/2", CMOS (BW/Color)
	Shutter	20 µs to 1,3 sec
	Detection rate	60 fps
	Frame rate	200 fps
<b>Protection</b>	Degree of protection	IP 52

## Dimensions



## Software



On live screen shutter gain and strobe can be adjusted  
 On code specification modus the detection area and the type of code can be setup  
 In the communication window the interface assignment takes place  
 In the I/O menu the in- and outputs can be defined  
 Under "Image History" the latest taken picture will be buffered

## Ordering information

Product	Part No.
<b>ELCR 4840 / 1B</b> for 2D barcode detection (B&W)	11013252
<b>ELCR 4840 / 2B</b> for OCR / OCV detection (B&W)	on request
<b>ELCR Power cable</b> Supply and RS232, 5 m	11293256
<b>ELCR Ethernet cable</b> Standard ethernet cable, 5 m	11293257
<b>ELCR Cross Ethernet</b> Cross ethernet cable, 5 m	11293258