

# TC1100

## Compact CCD Reader

DL Sm@rtSet

Programming Tool



1D/2D code reading

**PUZZLE  
SOLVER™  
Technology**
**RS232,  
Wedge, Pen**

Multiple Interface



## General Description

Datalogic's TC1100 Compact CCD Reader provides an entry-level solution for many OEM applications. Due to its well-balanced mix of technical characteristics, it is perfect for integration in custom equipment, setting a new standard in this product class.

The TC1100 has excellent reading capabilities and scans very close to the output window with a wide reading area and extended DOF. Its high-performance CCD camera (3,648 pixels), which executes 270 scans/sec, combined with *PUZZLE SOLVER™* technology, allows fast and accurate reading even with damaged or poor quality codes. In addition, its compact dimensions and light weight help reduce the overall dimensions and weight of the complete system.

The TC1100's ambient light immunity (100,000 lux), together with its reading capabilities permits installation in any environment, reducing costs. Furthermore, due to the absence of moving parts, the TC1100 grants a MTBF of 240,000 hours (Mean Time Between Failures) drastically reducing maintenance costs. The "All in One" communication system (RS232, Wedge and Pen Emulation) and optocoupled Input and Output lines permit easy and flexible interfacing with any type of controller. The optional 80° deflection mirror for side reading installations reduces the overall space needed, making even contact reading possible. The TC1100 can also be programmed by software commands sent via RS232 or with the intuitive configuration software DL Sm@rtSet™.

## Features

- > Excellent reading capabilities
- > Enhanced code reconstruction with the *Puzzle Solver™* technology
- > PDF417 bar code decoding (model TC1100-0200 only)
- > Flexible interface "All in One" architecture: RS232, Wedge and Pen emulation
- > DL Sm@rtSet: Windows-based programming tool
- > Lightweight
- > Compact dimensions

## Applications

- > Access control systems
- > Chemical and biomedical analysis machines
- > Automatic Tape Libraries (ATL)
- > Self Service Systems (ATM, Kiosk)
- > Game automation (Lotto, Lottery, etc.)
- > Film processing machines

### Specifications

#### ELECTRICAL CHARACTERISTICS

POWER SUPPLY 5 Vdc ± 5%  
 POWER CONSUMPTION 1.5W

#### MECHANICAL CHARACTERISTICS

DIMENSIONS 63 x 60.5 x 27mm (2.48" x 2.38" x 1.06") for scan engine  
 70.7 x 68.6 x 30.5 mm  
 (2.70" x 2.78" x 1.20") for complete scanner

CASE MATERIAL ABS (complete scanner)

#### PERFORMANCE

SCAN RATE 270 scans/sec.  
 READING RANGE 35 to 305 mm  
 SENSOR CCD Solid state (3648 pixels)  
 DECODER TYPE Built-in  
 MAX RESOLUTION 0.076mm (3mils)  
 READABLE CODES 2/5 family, Code 39, EAN/UPC, EAN128, Code 128, Code 93,  
 CODABAR, TELEPEN, PLESSEY, Code MSI, Code Delta IBM,  
 Code 11, Code 16K, Code 49  
 (stacked code version) PDF417, CODABLOCK

INTERFACES RS232, Wedge, Pen emulation

INPUT SIGNAL Trigger (optocoupled)

OUTPUT SIGNAL Good Read (optocoupled)

LED INDICATOR 'Power On'; 'Good Read'

#### PROGRAMMING METHOD

Automatic (via RS232) SW commands through the serial port  
 DL Sm@rtSet Windows configuration program

ENHANCED FEATURES Puzzle Solver™

CABLE LENGTH 100 cm (39.3 in.)

CONNECTOR TYPE 25 pins, D-Shell female

#### ENVIRONMENT

OPERATING TEMPERATURE 0 to 50 °C (32 to 122 °F)

STORAGE TEMPERATURE -20 to 70 °C (-4 to 158 °F)

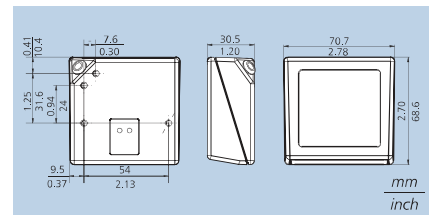
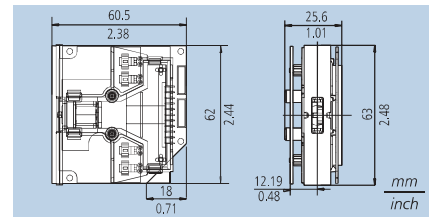
AMBIENT LIGHT IMMUNITY Up to 100.000 lux

HUMIDITY 90% non-condensing

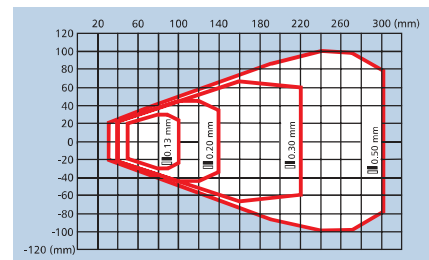
VIBRATION RESISTANCE IEC 68-2-6 test FC 1.5mm; 10 to 55 Hz; 2 hours on each axis  
 (complete scanner)

SHOCK RESISTANCE IEC 68-2-27 test EA 30 G; 11 ms; 3 shocks on each axis  
 (complete scanner)

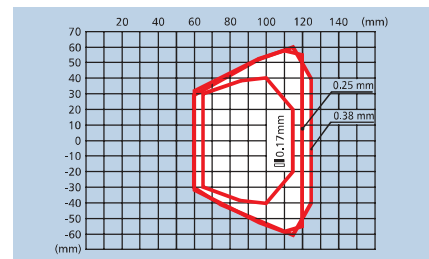
### Dimensions



### Reading Diagrams



Reading Area for Linear Codes



Reading Area for PDF417 Codes

