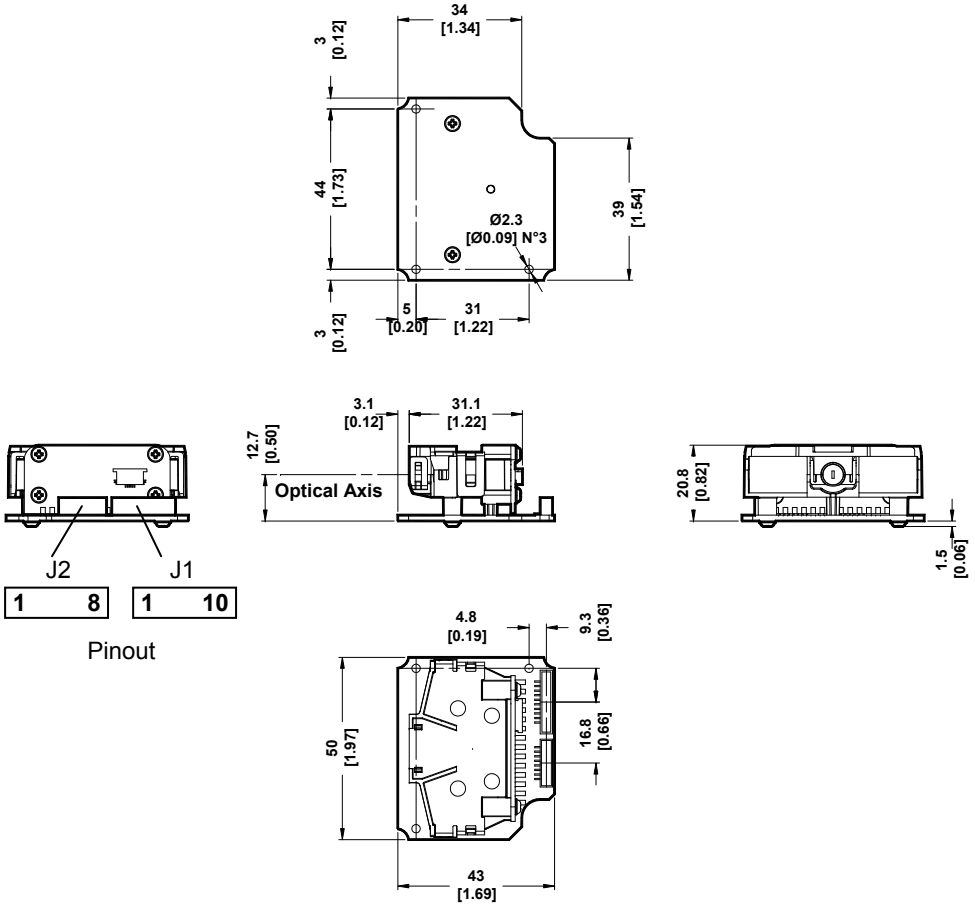


Mechanical Dimensions

Patents

This product is covered by one or more of the following patents:

US Patents: 5,311,000; 5,481,098; 5,929,421; 5,992,740; 6,098,883; 6,260,764; 6,443,360 B1; 7,075,663 B2.

European Patents: 789,315 B1; 926,620 B1; 997,760 B1; 1,217,571 B1; 1,804,089 B1.

Chinese Patent: ZL200680050007,8.

Additional patents pending.

DATALOGIC™

TC1200-0X00

CCD Scan Engine

Quick Reference Guide

The TC1200-0X00 is a linear CCD Scan Engine for OEM applications. It is available in two different versions:

Model	Description	Order Number
TC1200-0000	CCD Reader Scan Engine, RS232	939501110
TC1200-0100	CCD Reader Scan Engine, USB	939501111

Technical Specifications

Power supply	5 Vdc ± 5%
Consumption	350 mA; 1.75 W
Interfaces	RS232, USB
Max Scans/sec	320
Max resolution	0.076 mm (3mils)
Readable codes:	EAN/UPC; Code 39, Code 32; Code 128, GS1-128, ISBT 128; Interleaved, Standard, and Industrial 2 of 5; Codabar, ABC Codabar; GS1 Databar (Omnidirectional, Limited, Expanded); Code 93; Code 11; MSI; Plessey

Default Configuration

RS232 Interface	RS232, 9600, N, 8, 1, ACK/NAK disabled, inter-character delay disabled, Enable Character = E, Disable Character = D
Reading Parameters	Illumination Mode = Triggered, Operating Mode = On Line, Phase Off Event = Trigger Stop, Label Programming Mode enabled, Exposure Mode = Continuous, Reading Condition = Auto, Positive Foreground/Background
USB Interface	USB-COM, ACK/NAK disabled, inter-character delay disabled, Enable Character = E, Disable Character = D
Reading Parameters	Illumination Mode = Triggered, Operating Mode = Serial On Line, Serial Start = STX, Serial Stop = ETX, Phase Off Event = Trigger Stop, Label Programming Mode enabled, Exposure Mode = Continuous, Reading Condition = Auto, Positive Foreground/Background
Common Data Format	Data Transmission = On Decode, Prefix (Header) = <NUL>, Suffix (Terminator) = <CR>, Code ID disabled, No Read Character = <CAN>, Code Verifier disabled, Case Conversion disabled
Code Selection Enabled codes	• Code EAN-8, EAN-13, UPC-A, UPC-E: without Add-On, Check Digit transmitted, no conversions • Code 39: length: variable 2 - 50 • Code 128: Check Digit not transmitted, length: variable 1 - 80 • GS1-128: transmit labels in GS1-128 data format
Other Parameters	Digital Outputs disabled, Power Save disabled, no Advanced Formatting

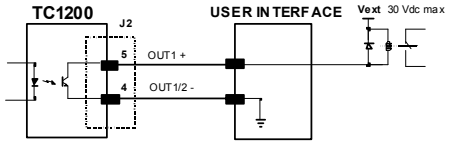
Electrical Connections

J1 connector		
1	D-	USB Data, negative
2	D+	USB Data, positive
3	GND	power ground
4	GND	power ground
5	TX	transmit data
6	RTS	NOT USED
7	RX	receive data
8	CTS	NOT USED
9	VCC	+5Vdc
10	GND	power ground
J2 connector (RS232 model Only)		
1	GND	power ground
2		NC
3	OUT2 +	output 2, positive
4	OUT 1/2 -	output 1/2 negative
5	OUT1 +	output 1, positive
6		NC
7	EXT-TRIG -	external trigger, negative
8	EXT-TRIG +	external trigger, positive

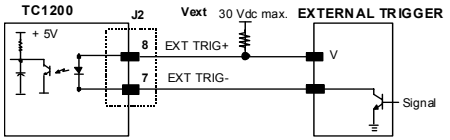
Physical Dimensions

Width	50 mm (1.96 inches)
Length	43 mm (1.69 inches)
Height	21 mm (0.82 inches)
Weight - max.	30 g. (1 oz.)

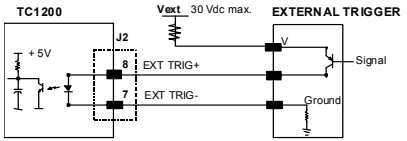
I/O Connections (RS232 model Only)



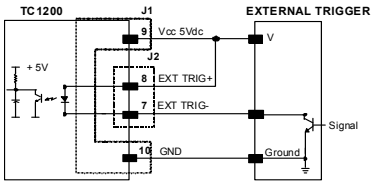
Example Output 1 NPN Connection



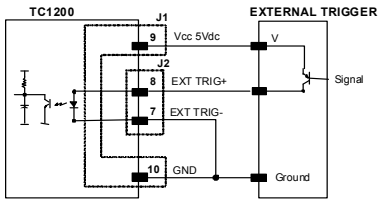
Input NPN command using external power



Input PNP command using external power



Input NPN command using TC1200 power



Input PNP command using TC1200 power

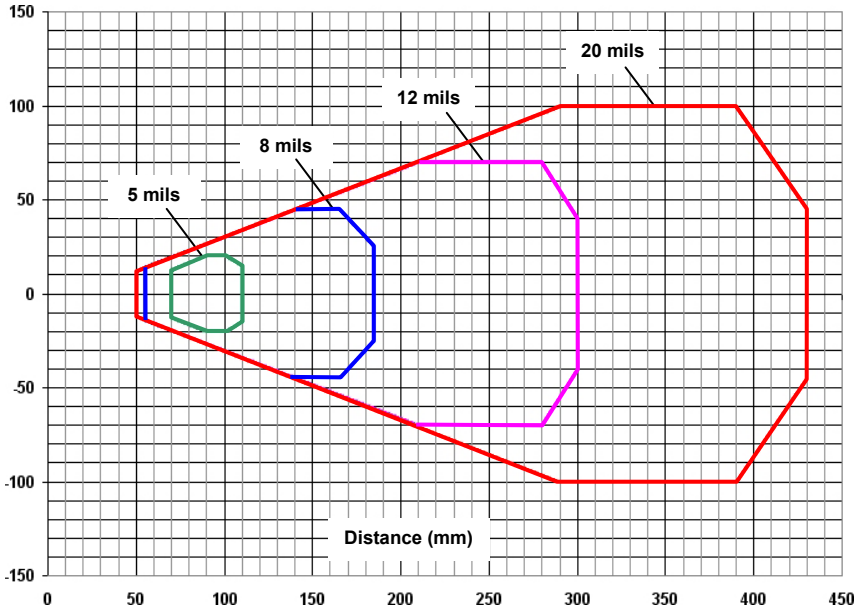
External Trigger Connections

Configuration

For detailed information on the TC1200 programmability and complete parameter list, please refer to the TC1200 Reference Manual available on the website at: www.automation.datalogic.com.

Reading Diagrams

The following diagram was obtained according to the conditions listed below. Code reading with skew angles of less than 10° may cause decreased performance due to direct light reflection.



Reading Diagram TC1200-0X00

(0,0) corresponds to the scan engine output window.

Conditions:

Static Code Reading
Exposure Mode = Continuous
Code = Code 39
Quality = Grade A
Lighting = No Ambient Light (0 Lux)
Pitch = 0°
Skew = 10°
Tilt = 0°