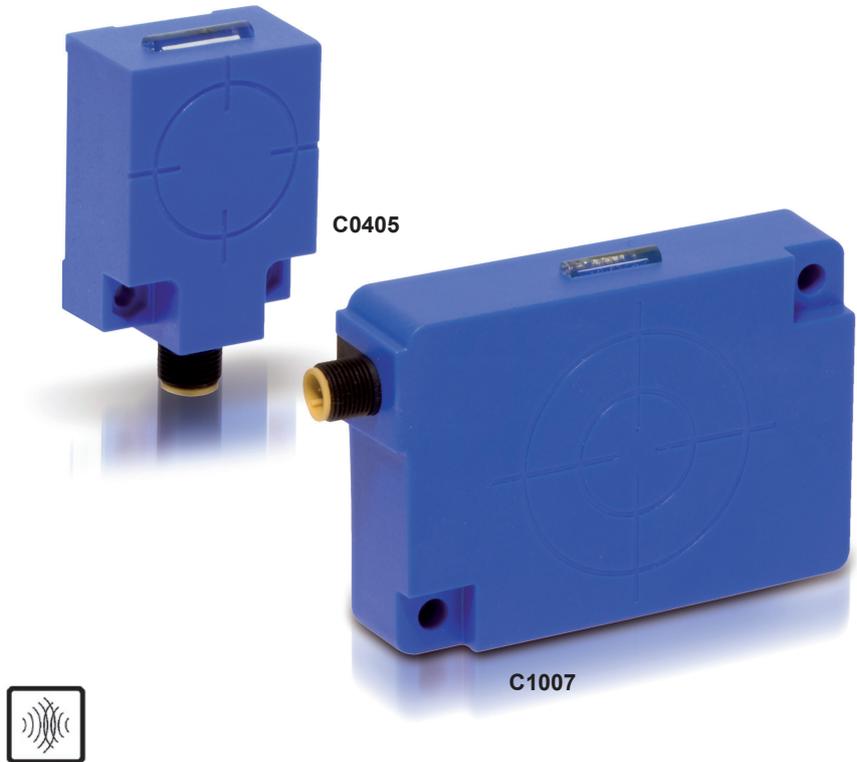


C SERIES

Rugged, highly connected **C-Series** HF RFID integrated controller/antenna bring fast and low cost RFID solution to the factory floor. The **C0405** and **C1007** offers direct serial connectivity and network connectivity via our Gateway. The microprocessor architecture used by all C-Series family products accommodates advanced automation features such as C-Macro™, plug and play hardware replacement and modular system expansion. Industrial M12 connectors ensure trouble free operation inside the industrial environment for manufacturing applications such as machine control, work-in-progress and other factory automation applications.



IDENTIFICATION

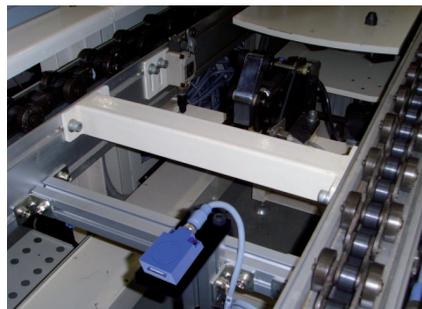
HIGHLIGHTS

- C0405 has an extremely compact size
- C1007 may be mounted directly on metal for installation flexibility
- Reads/Writes ISO 14443A and ISO 15693 compatible RFID Tags
- Integrated controller/antenna design eliminates cabling restrictions for easier installation
- Advanced electronics permit longer read/write distance and reduce sensitivity to the proximity of metal in the field for higher performance in difficult environments
- C-Macro™ command software for easy integration with industrial control systems

APPLICATIONS

C-Series Controllers are ideal for tracking packages on a conveyor belt, allow operation and data write during the semiconductor wafer manufacturing process, hard disk production process and anywhere cleanroom operation are requested.

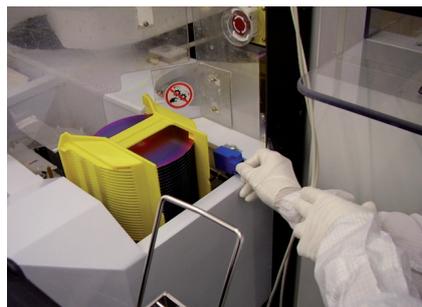
Tracking



Electronics manufacturing

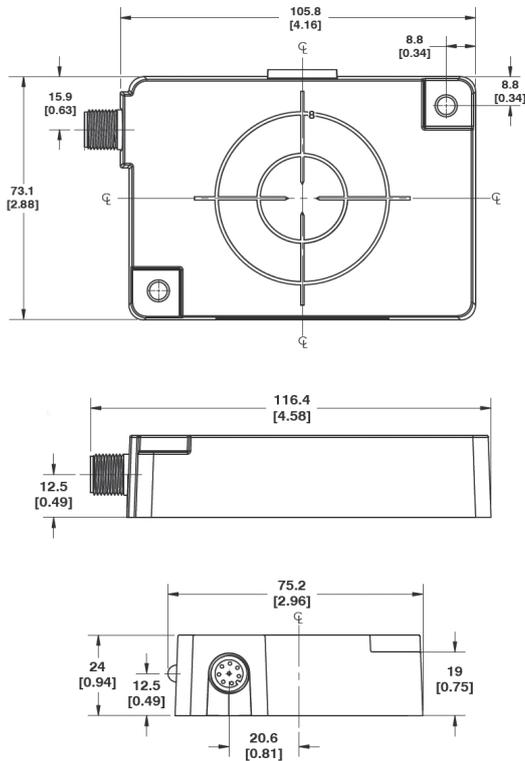


Hard Disks manufacturing

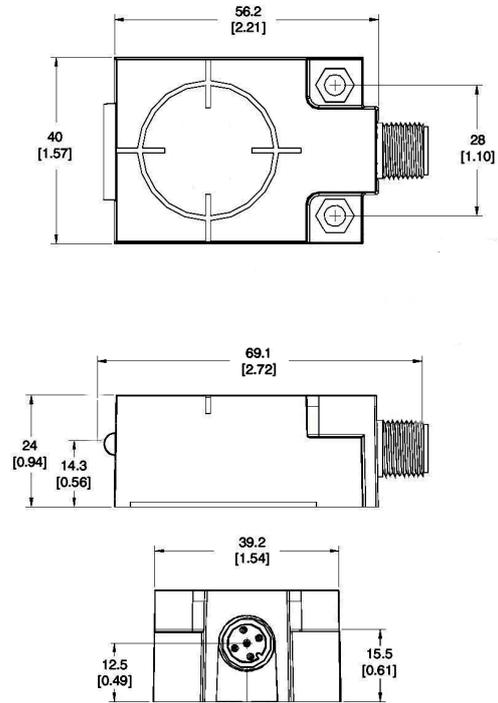


DIMENSIONS

C1007



C0405



mm
[inches]

TECHNICAL DATA

	C0405	C1007
Mechanical Dimensions	40x56x24 mm	103x73x24 mm
Consumption	2.4W @ 24 Vdc	3.6W @ 24Vdc
RF Power	100 mW	500 mW
Power Supply	10-30 Vdc	
Operating Temperature	-20° to 49° C (-4° to 120° F)	
Storage Temperature	-40° to 85° C (-40° to 185° F)	
Humidity	5 – 95% non-condensing	
Vibration	IEC 68-2-6. Test FC 1.5mm, 10 to 55 Hz, 2 hours each axis.	
Shock	IEC 68-2-27. Half-sine 30 g, 11 ms, 3 shocks per axis.	
Air Protocols	ISO 15693; ISO 14443A.	
RF Frequency	13.56 MHz	
Compliance	FCC; CE; TELEC.	
Protection	IP67	
Connectivity	RS232/422/485 ¹ , USB	

Note¹: Ethernet connection via DATALOGIC Gateway or Hub

MAXIMUM READ/WRITE DISTANCES

	HF-250HTF	HF-250F	HF-250HTI	HF-250I	HF-250HTS	HMS125	LRP125S
C0405	85 mm	85 mm	85 mm	85 mm	90 mm	24 mm	55 mm
C1007	145 mm	140 mm	135 mm	132mm	160 mm	27 mm	90 mm

Note: All values measured in free air and under laboratory conditions

INDICATORS

C-Series RFID Controllers have eight LED status indicators. The LEDs are conveniently located on the top panel of the device and display everything from antenna RF and communications activity to Node ID, diagnostic information and power status.

LED Color	Red	Green	Amber	Amber	Amber	Amber	Amber	Green
Function	RF Activity	COM Activity	Node 2 ⁴ (16)	Node 2 ³ (8)	Node 2 ² (4)	Node 2 ¹ (2)	Node 2 ⁰ (1)	Power On

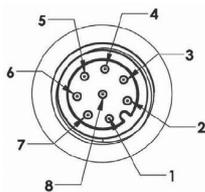
antenna field on this side

Led descriptions

- **RF LED:** Color is red. The RF LED will illuminate while RF power is being transmitted by the antenna, and will stay ON during the entire RF operation. By default, this occurs each time an RF command is being executed.
- **COM LED:** Color is green. The COM LED indicates that data is being transmitted between the host and the C1007/C0405. On receipt of a command, the COM LED will begin flashing ON and OFF rapidly. After the controller generates the command response, COM LED flashing will halt. When in Continuous Read mode, the COM LED will remain ON and will turn OFF briefly only while a tag is in the antenna field and data is being read or written to the tag.
- **Node LEDs:** Colors are amber. These five LEDs indicate the serial communications type for C1007-232, C0405-232 and -USB models. For the C1007-485 and C0405-485 models, the five amber LEDs indicate (in binary from right to left) the current Node ID value assigned to the controller. The five amber LEDs also flash an error code when a fault occurs (see Manuals).
- **Power LED:** Color is green. The Power LED will remain ON while power is applied to the C1007-Series and C0405-Series RFID Controllers.

CONNECTIONS

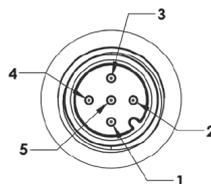
CXXXX-232/422-01
Interface Connector - Diagram



CXXXX-232/422-01
Interface Connector - Pinout

PIN	DESCRIPTION
1	10..30 VDC POWER
2	0 VDC (POWER GROUND)
3	NOT CONNECTED / TX-*
4	NOT CONNECTED / TX+*
5	NOT CONNECTED / RX-*
6	RX / RX-*
7	TX / NOT CONNECTED*
8	SGND (SIGNAL GROUND)

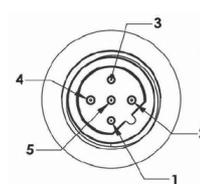
CXXXX-485-01
Interface Connector - Diagram



CXXXX-485-01
Interface Connector - Pinout

PIN	DESCRIPTION
1	SGND (SIGNAL GROUND)
2	10..30 VDC POWER
3	0 VDC (POWER GROUND)
4	TX / RX+
5	TX / RX-

CXXXX-USB-01
Interface Connector - Diagram



CXXXX-USB-01
Interface Connector - Pinout

PIN	DESCRIPTION
1	+ 5V
2	D-
3	D+
4	GND
5	SHIELD

Note*: for CXXXX-422-01 models.

MODEL SELECTION TABLE

MODEL	DESCRIPTION	ORDER N°
C0405-232-01	HF Controller with RS232 connection interface	970328002
C0405-485-01	HF Controller with RS485 connection interface to Subnet16™ network	970328003
C0405-USB-01	HF Controller with USB connection interface	970328004
C0405-422-01	HF Controller with RS422 connection interface	970328008
C1007-232-01	HF Controller with RS232 connection interface	970329002
C1007-485-01	HF Controller with RS485 connection interface to Subnet16™ network	970329003
C1007-USB-01	HF Controller with USB connection interface	970329004
C1007-422-01	HF Controller with RS422 connection interface	970329005

ACCESSORY SELECTION AND ORDER INFORMATION

MODEL	DESCRIPTION	ORDER N°
HF-0405-ANT-03	C0405 Controller extension antenna 18 mm	970330008
HF-0405-ANT-06	C0405 Controller extension antenna 30x40 mm	970330009



The company endeavours to continuously improve and renew its products; for this reason the technical data and contents of this catalogue may undergo variations without prior notice. For correct installation and use, the company can guarantee only the data indicated in the instruction manual supplied with the products.