



Cobalt HF™ C-Series

Compact, Rugged, Integrated RFID Controller/Antennas

FEATURES and BENEFITS

COBALT HF™ family architecture including C-MACRO™ command software for easy integration with industrial control systems.

Rugged M12 Connectors and industrial design assure protection from moisture and dust in harsh environments.

Easy to read LED indicators provide helpful diagnostics.

Advanced electronics permit longer read/write distance, and reduced sensitivity to the proximity of metal in the field for higher performance in difficult environments.

C-Macro™ command software, and advanced micro-processing reduce network traffic between reader and host

Integrated controller/antenna design eliminates cabling restrictions for easier installation.

Plug 'n' Play allows effortless installation of additional Cobalt controllers on a network.

Multi-tag firmware allows groups of tags to be read in the same field at the same time.

C1007 may be mounted directly on metal for installation flexibility.



C0405



C1007

Rugged, highly connected Cobalt HF™ C-Series RFID Antenna/Controllers bring fast and low cost RFID to the factory floor. The C-Series offers direct serial connectivity and network connectivity via the EMS series of Gateways.

The microprocessor architecture used by all C-Series family products accommodates advanced automation features such as C-Macro™, plug'n'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.

25+ years of experience with RFID systems for manufacturing are behind every EMS system, supported by Datalogic around the world.

CONNECTIVITY MODELS

C0405-232, C1007-232, C0405-485*, C1007-485*, C0405-USB, C1007-USB.

**Ethernet connection via EMS Gateway or Hub.*

COMPATIBLE TAGS

EMS LRP/S Series
 EMS HMS Series
 EMS T-Series
 EMS I-Series
 I-Code™ SLi & I-Code 1
 Mifare™ Classic
 Texas Instruments Tag-It™
 Fujitsu ISO15693
 Infineon ISO15693

RFID AIR PROTOCOLS

ISO15693; ISO14443A

C0405

EXTENSION ANTENNAS

18mm: HF0405-ANT-03
 3x4cm: HF0405-ANT-06



Cobalt HF™ C-Series

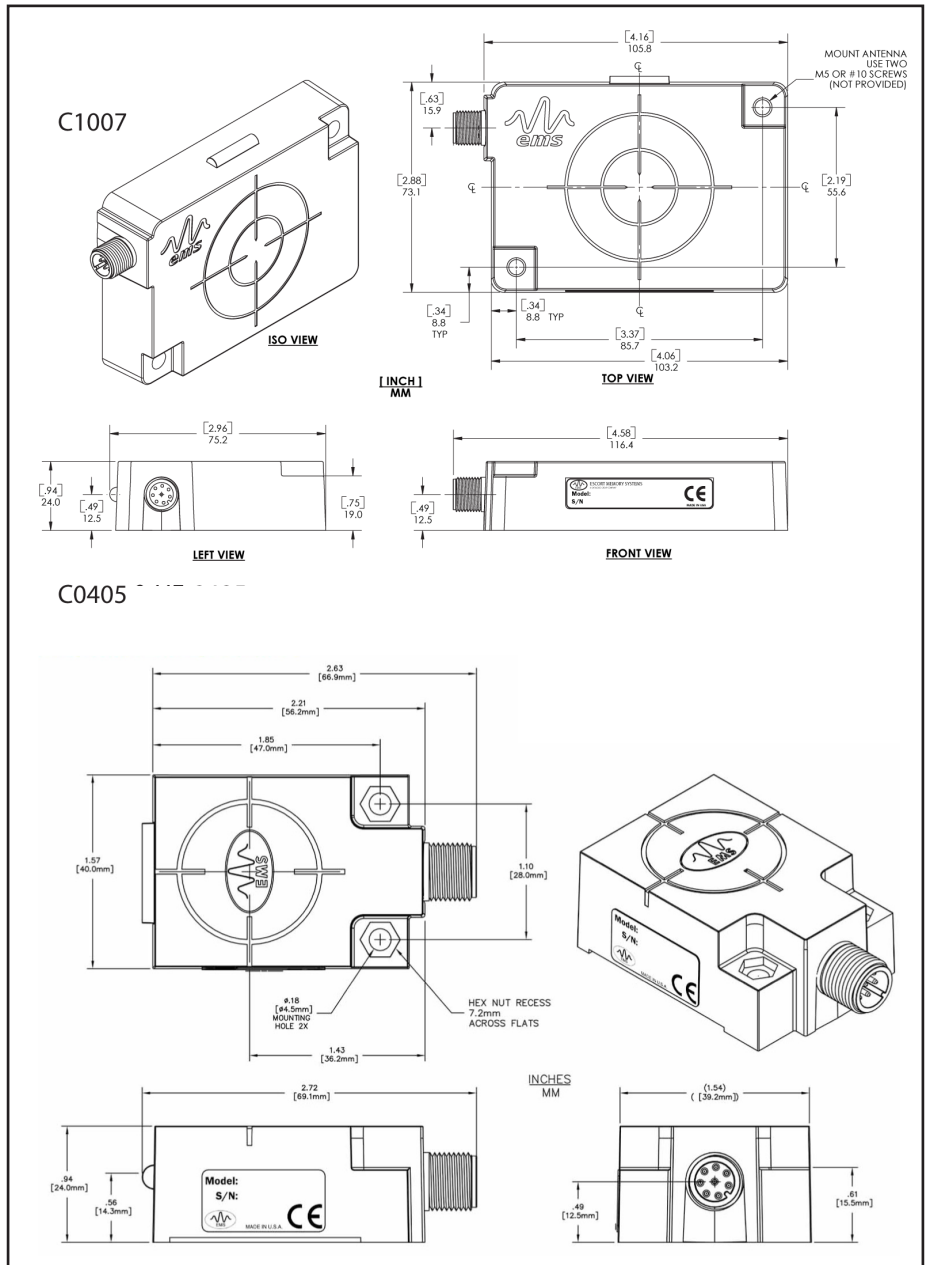
SPECIFICATIONS

	C0405	C1007
DIMENSIONS, mm	40.0x56.2x24	103.2x73.1x24
CONSUMPTION	2.4W @24Vdc	3.6W @ 24Vdc
RF OUTPUT	100mW	500mW
POWER SUPPLY	24Vdc (10-30 Vdc)	
OPERATING TEMP	-20° to 49° C (-4° to 120°F)	
STORAGE TEMP	-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, 11ms, 3 shocks per axis.	
AIR PROTOCOLS	ISO15693; ISO14443A.	
RF FREQUENCY	13.56MHz	
COMPLIANCE	FCC; CE; TELEC.	
PROTECTION	IP67	

C0405-232 READ/WRITE SPEEDS

PC-TO-C0405-232 RESPONSE, Milliseconds*				
TAG SERIES	For 8 BYTES		For 110 BYTES	
	READ	WRITE	READ	WRITE
LRP-S	14	25	55	287
HMS	47	60	97	159
I-TAGS	15	17	136	176
T-TAGS	14	13	44	112

*NOTE: Measured speeds under laboratory conditions in free air for a direct-connected PC to C0405-232 without any Gateway or network. Read/write speeds for any particular application depend on the combined transmission speed effects of the system. Networks, interface overheads, PLC or PC operating system delays, etc., will all have an effect. Contact EMS Tech Support for more design information and assistance.



MAXIMUM READ/WRITE DISTANCES, mm /inch. IN AIR, EXCEPT AS NOTED. NOTE*: Tag mounted on metal. NOTE**: C1007 mounted on metal.

	HMS125(HT)	HMS250(HT)	T130	T7036 / T5050	I-108	LRP125S (HT)	LRP-P972HTS	LRP250S(HT)	LRP525S(HT)
C0405	20 / 0.80	39 / 1.5	50* / 2.0	50*, 65 / 2*, 2.5	20 / 0.80	40 / 1.5	43 / 1.7	80 / 3.1	70 / 2.8
C1007**	30 / 1.2	80 / 3.1	75* / 3.0*	100 / 3.9	NR	50 / 2.0	60 / 2.4	100 / 3.9	100 / 3.9