

Integrated Modular Controller/Antennas **COBALT HF™**

FEATURES

Advanced RF electronic design permits 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.

Expanded choice of air protocols provides for a broad range of industrial applications.

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

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

Five controller communication options support a variety of standards for flexible connectivity to host systems, including Ethernet, Industrial Ethernet, DeviceNet, RS232, RS422, RS485, and USB.

Full range of antenna sizes will fit many industrial installation requirements.

Multiple-Tags-In-Field Anti-Collision Firmware allows reading groups of tags in proximity.

COMPATIBLE TAGS

Escort Memory Systems T-Series, HMS and LRP, Philips Mifare, ICODE1/ICODESLI, Texas Instruments Tag-It, Fujitsu, and Infineon Tags.



Rugged, highly connected Cobalt HF™ RFID systems give integrators fast, low cost RFID readers and tags for the factory floor. With read/write ranges from 2" – 24", the Cobalt HF™ family offers the most complete connectivity of any system available including Ethernet, Ethernet IP, Modbus TCP, DeviceNet™ and serial connections. A microprocessor architecture used by all Cobalt HF™ family products accommodates advanced automation features such as C-Macros™, plug'n'play hardware replacement and modular system expansion. Rugged IP 66 construction insures reliable operation inside harsh industrial environments.

RFID systems stream increasing amounts of data to factory hosts over high speed industrial networks often overloading plant floor networks. Escort Memory Systems landmark Cobalt HF™ product allows the factory integrator to unload the network by driving decision making down to the RFID reader level. Using a simple programming tool (C-Macro™), integrators and endusers apply simple rules for handling RFID data at the local level.

Eight LED's give quick visual information on Cobalt HF™ operations. Rugged connectors insure trouble free operation inside the industrial environment for critical applications such as machine control, work-in-progress and other factory automation applications.

SPECIFICATIONS

Communications:
 Multi-drop 485; within Subnet16™ network; RS232; RS422; USB; DeviceNet; Standard Ethernet; Ethernet IP; Modbus TCP.

Air Protocols:
 ICODE 1, ISO 15693, ISO14443 A.

Compliance:
 FCC, CE and TELEC.

Enclosure rating:
 IP66.

Operating Temperature Range:
 -20° to 49° C (-4° to 120°F).

Storage Temperature Range:
 -40° to 85° C (-40° to 185°F).

Vibration Resistance:
 IEC 68-2-6. Test FC 1.5mm, 10 to 55 Hz, 2 hours each axis.

Shock Resistance:
 IEC 68-2-27. Half-sine 30 G, 11ms, 3 shocks per axis.

Humidity:
 100% non-condensing.

Dimensions:
 See page 2.

Connectors:
 M12 (IP66 rating).

Voltage Rating:
 10-30 VDC.

Power Consumption:
 12 Watts.

RF Power:
 1 Watt.

Status Indicators:
 8 LED's indicating power, communication, read/write activity, network address and error codes.



ESCORT MEMORY SYSTEMS
A Datalogic Group Company

Integrated Modular Controller/Antennas

COBALT HF™

MECHANICAL DRAWINGS

MODELS

Controllers (CNTL)

HF-CNTL-IND-01

HF-CNTL-DNT-01

HF-CNTL-485-01

HF-CNTL-422-01

HF-CNTL-232-01

HF-CNTL-USB-01

Antennas (ANT)

HF-ANT-0750-01

HF-ANT-1010-01

HF-ANT-2020-01

HF-ANT-3030-01

ACCESSORIES

HF-ANT-CBL-07

7m remote extension cable kit

CBL-1513

USB cable for CNTL-USB

CBL-1514-05

USB Connector for CNTL-USB

CBL-1515

Ethernet cable for CNTL-IND

00-1166

Power Supply 45W 24VDC

1.88A Max

00-1167

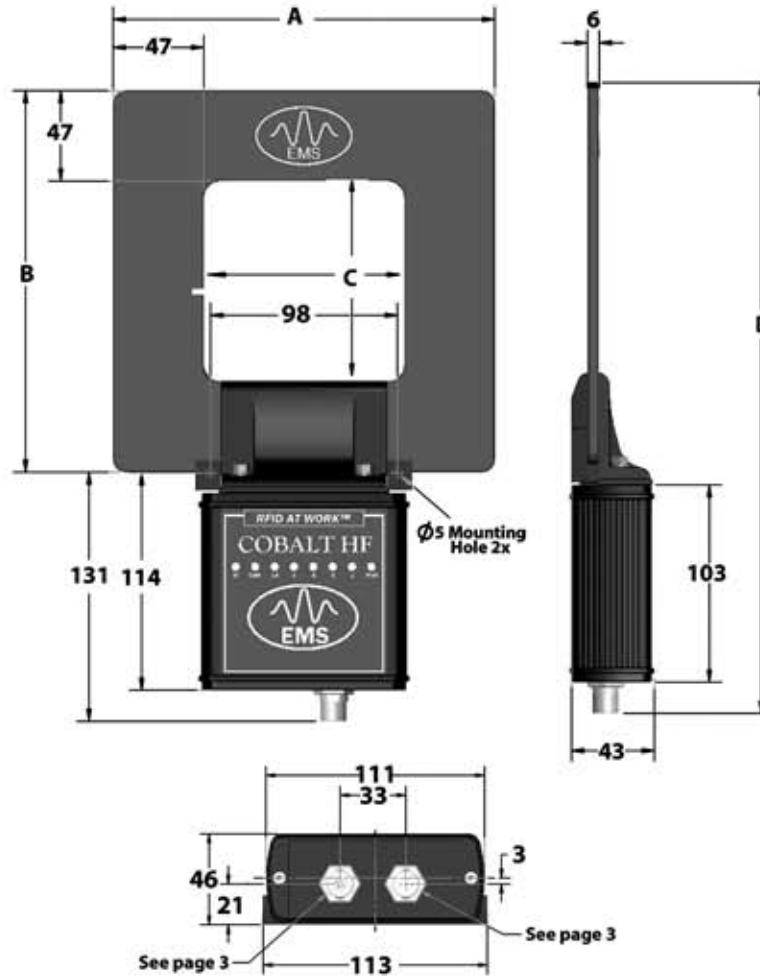
Power Supply 100W 24VDC

4.17A Max

00-1168

Power Supply 120W 24VDC

5.0A Max



DIMENSION (mm)	A	B	C	D
HF-ANT-1010-01	100	112	0	242
HF-ANT-2020-01	200	200	106	331
HF-ANT-3030-01	300	300	206	421
HF-ANT-0750-01	SEE PAGE 4			

ANTENNA	TAG RANGES						
	TAG Model ¹	HMS(P)125(HT)	HMS(P)150(HT)	LRP(P)125(HT)	LRP-P-3858	LRP250(HT)S	LRP525HTS
HF-ANT-1010	64/2.5	127/5.0	152/6.0	216/ 8.5	267/10.5	254/10.0	
HF-ANT-2020	64/2.5	183/7.2	203/8.0	292/11.5	381/15.0	381/15.0	
HF-ANT-3030	nr	165/6.5	228/9.0	343/13.5	406/16.0	432/17.0	
HF-ANT-0750 ²	nr	25/1.0	38/1.5	51/2.0	102/4.0	102/4.0	

Note 1. Tags read/write up to these distances, may be affected by EM/EMF and metal nearby
 Note 2. HF-ANT-0750 is tuned for mounting in a metal conveyor environment.
 nr = not recommended

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 Imprimantes - logiciels - lecteurs - consommables
 Accessoires, pièces détachées et solution clé en main

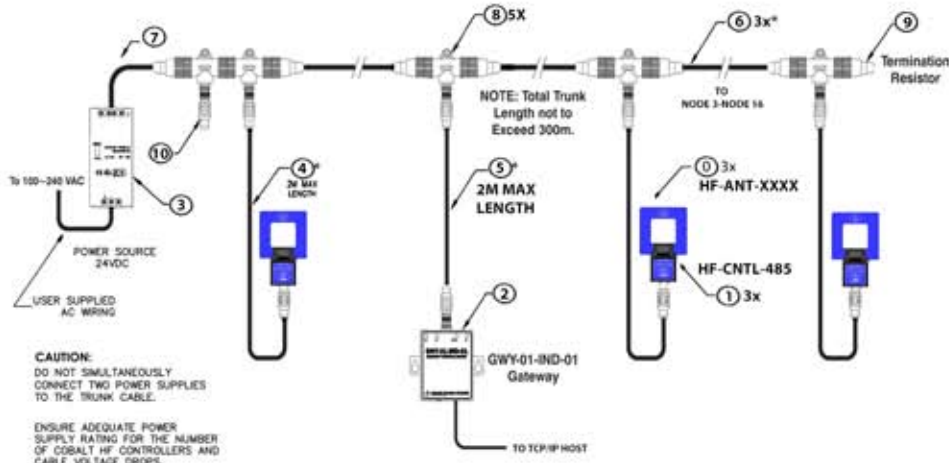


Integrated Modular Controller/Antennas COBALT HF™

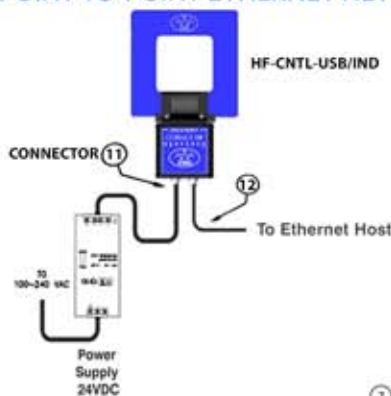
SUBNET16™ NETWORK

ITEM	QTY	PART DESCRIPTION	EMS P/N
10	1	Male, M12, ThinNet Termination Resistor	CBL-1490
9	1	Male, 7/8 - 10 ThickNet Termination Resistor	CBL-1489
8	1 - 18	ThickNet/ThinNet Drop-T Connector	CBL-1485
7	1	Female/Bare Wire, ThickNet Trunk Cable	CBL-1495-XX
6	1 - 15	Male/Female, ThickNet Trunk Cable	CBL-1483-XX
5	1	Male/Male ThinNet Drop Cable	CBL-1481-XX
4	1 - 16	Male/Female, ThinNet Drop Cable	CBL-1480-XX
3	1	Power Supply, 120W, 24VDC, 5.0A MAX	00-1168
2	1	Gateway, Subnet16™, Industrial Ethernet	GWY-01-IND-01
1	3	COBALT HF Series Controller, 485	HF-CNTL-485
0	3	COBALT HF Series Antennas	HF-ANT-XXXX

XX = Length in Meters



POINT-TO-POINT ETHERNET NETWORK

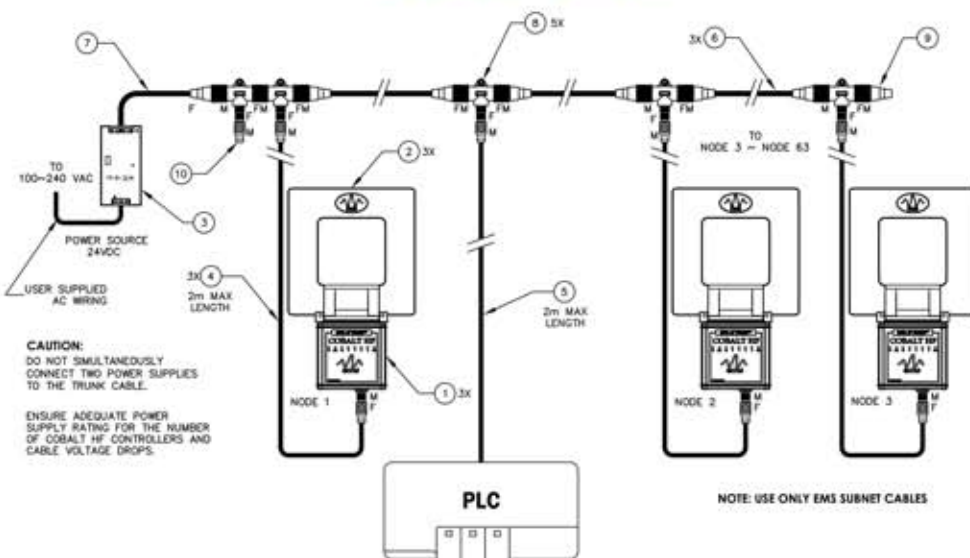


Item	Qty	Part Description	EMS p/n
11	1	Straight Female M12 5-pin Field Mountable Connector	CBL-1487
12	1	CAT5E Ethernet cable for connection to CNTL-IND/TCP, 5m	CBL-1515-05

DEVICENET™ NETWORK

10	1	PLUG, MALE, M12, THINNET, TERM RES	CBL-1490
9	1	MALE 7/8-16 THICKNET TERMINATION RESISTOR PLUG	CBL-1489
8	1-64	CONN, 5P, 7/8-16 F, M12 F, 7/8-16M DROP-T	CBL-1485
7	1	CABLE, 7/8-16F, 5P/LEADS, THICK	CBL-1495-XX
6	1-62	MALE/FEMALE, THICKNET TRUNK CABLE	CBL-1483-XX
5	1	MALE/MALE, THINNET DROP CABLE	CBL-1481-XX
4	1-63	MALE/FEMALE, THINNET DROP CABLE	CBL-1480-XX
3	1	PWR SPPLY, 120W, 24VDC, 5.0A MAX	00-1168
2	3	ANTENNA, COBALT, 20cm X 20cm	HF-ANT-2020-01
1	3	CONTROLLER, COBALT HF, DEVICENET	HF-CNTL-DNT-01
ITEM	QTY	PART DESCRIPTION	EMS P/N

XX= LENGTH IN METERS



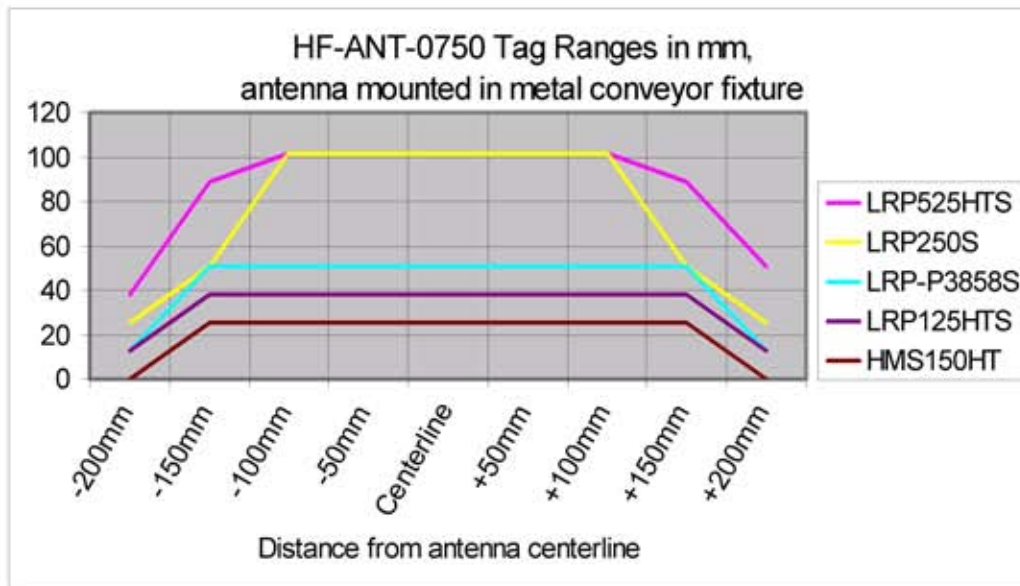
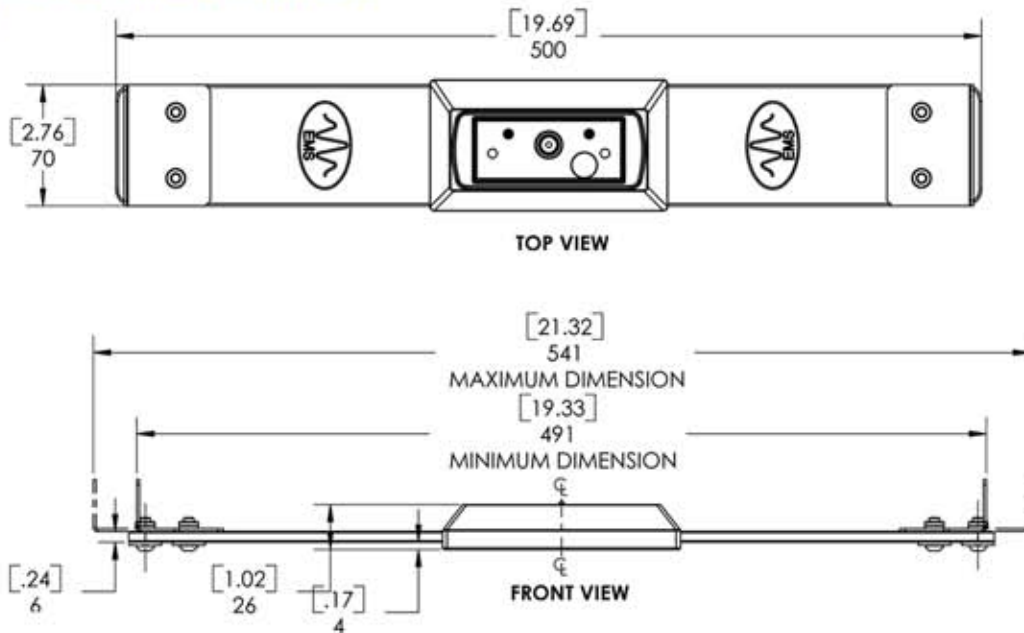
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HF-ANT-0750-01 MECHANICAL DIMENSIONS [inches] mm



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