



HMS827-05

Passive Reader/Writer

Features

- Serial Reader/Writers with Integrated Antenna
- Menu Configurable RS232 and RS485 Multidrop Interface
- Dip Switch Configurable Horizontal and Vertical Reading
- 1000 Bytes/Second Data Transfer Speed
- Passive Tag Requires No Batteries
- NEMA 12 (IP65)
- 18-30VDC Operation

Applications

- Material Handling
- Sortation Systems
- Work-in-Progress Monitoring
- Quality Control

Use With

- HMS-Series Tags
- CM01 Asynchronous Serial Interface Module
- CM11 / CM12 DeviceNet Modules
- CM21 InterBus-S Module
- CM30-Series Profibus Modules
- CM40-Series Modbus Plus Modules
- CM52 Remote I/O Module
- CM80-Series ControlNet Modules
- CM900 / CM1000
- CM1746 RFID Module
- MM80MicroMux Bus Module
- Any RS232 and RS485 Host

EMS, a Datalogic Group Company, is the field-proven leader in the development and application of Radio Frequency Identification (RFID) Tags/Labels/PCBs, Antennas, Controllers and network interface modules for tough industrial environments. With over a dozen years of RFID successes in the automotive, electronics, material handling and food processing industries, EMS has built a global reputation in providing customers with complete supply chain solutions – from production to retail EMS has the complete solution!

Escort Memory Systems' HMS-Series is the latest in the EMS line of high performance, industrial RFID equipment. The passive design of the HMS Reader/Writer system uses the RF field from the Antenna to power the Tag, eliminating the need for batteries.

The HMS827-Series Passive Reader/Writers are extremely compact units housed in durable, two part ABS plastic enclosures. The HMS827 Reader/Writers are available with a RS485 multidrop interface (Mux32 protocol) and an RS232 point-to-point interface. The HMS827 Reader/Writers also have selectable horizontal and vertical read positions.

The patented industry standard limit switch body of the HMS827 Reader/Writers makes it ideal for use in factory automation environments where space is limited. The Reader/

Writers are solid state devices and are housed in a NEMA 12, ABS enclosure.

The HMS827-05 incorporates a threaded 30mm diameter tubular antenna with two M30 mounting nuts. The antenna is attached to the head with a 1 meter flexible cable.

Technical Description

The HMS827-05 interface block contains the power supply, logic, serial interface and terminal blocks for external connections. The head block contains the analog transmitter. The HMS827-05 Reader/Writer uses the internationally recognized ISM frequency of 13.56 MHz to both power the Tag and to establish a radio link to transfer the data.

Error checking routines ensure that the Tag data is correctly received by the Antenna even in

environments of heavy RF interference. A bi-color (red/green) LED provides continuous operational feedback. The HMS827-05's small size, multi-drop features and high data transfer speed, combined with a versatile assortment of Tags, provide a powerful solution for any application.

**30MM
TUBULAR
REMOTE
ANTENNA**

HMS827-05 Passive Reader/Writer

Electrical	Supply Voltage	18-30VDC \pm 10%
	Current	160mA@24VDC (3.84W)
RF Interface	Data Transfer Rate	1000 Bytes/Second
	Error Detection	CRC and Parity Check
	Antenna Type	Integrated 2 Axis, User Selectable Horizontal and Vertical Reading
	HMS827	18mm Tubular, 1 Meter Cable
	HMS827-03	30mm Tubular, 1 Meter Cable
	HMS827-05	30 x 40 x 12mm Rectangular Remote Antenna
	HMS827-06	
Interface	Serial Host Interface	RS232
		RS485/Mux32
	Baud Rate (RS232)	1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200
	Baud Rate (RS485/Mux32)	9600 or 346K
Mechanical Specifications	Dimensions (W x H x D)	4.68 x 1.79 x 1.57in. (119 x 45 x 40mm)
Environment	Operating Temperature	-4° to 120°F (-20° to 49°C)
	Storage Temperature	-40° to 185°F (-40° to 85°C)
	Humidity	95% Non-Condensing
	Protection Class	NEMA 12 (IP65)

HMS827-05 Passive Reader/Writer

Typical & Guaranteed Read/Write Ranges

(inches/mm)*

Tags

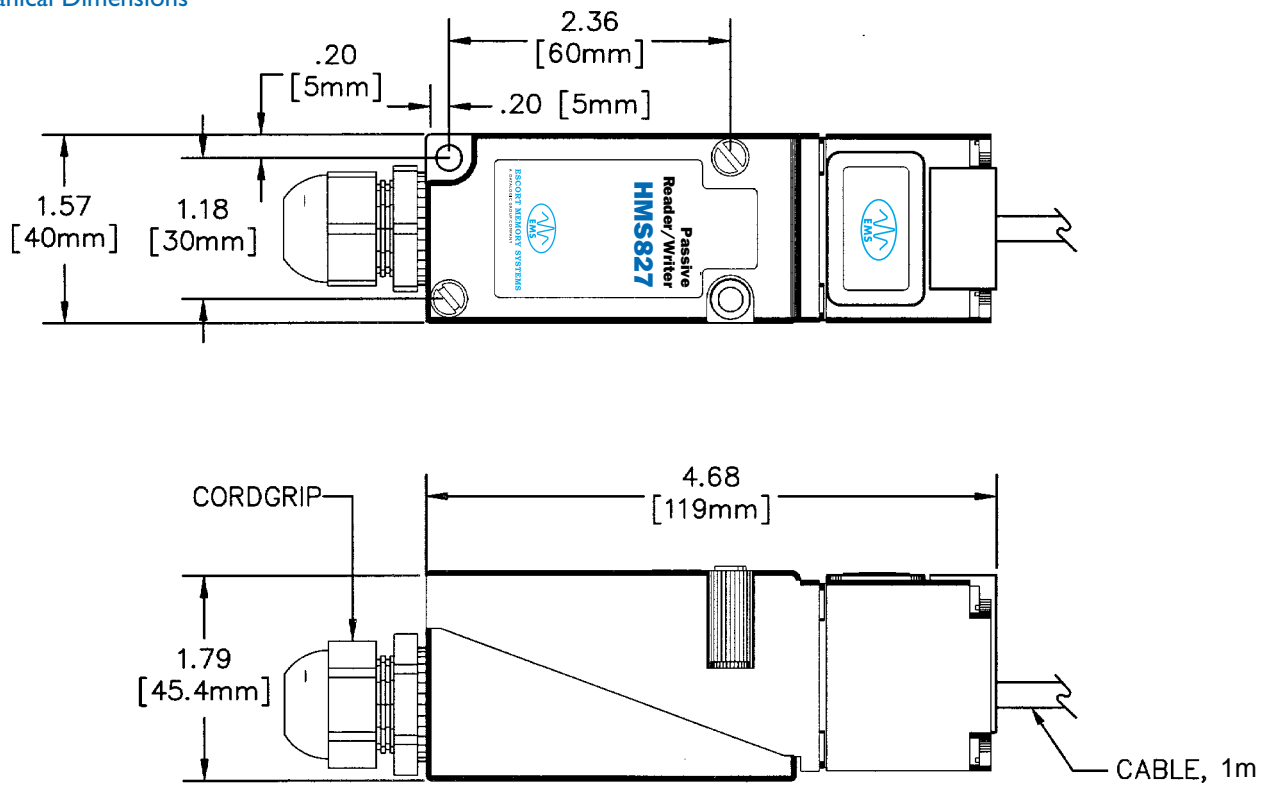
	HMS108	HMS108LT L002	HMS112	HMS125(HT)	HMS150(HT)
Typical Range (Z) (inches/mm)*	0.39/10	0.35/9	0.55/14	1.06/27	1.77/45
Guaranteed Operating Range	0.312/8	0.28/7.2	0.44/11.2	.848/21.6	1.416/36

* Proximity to metal, CRT devices and other sources of electromagnetic radiation may affect the range of the Antenna.

Available Models

Model	Description
HMS827	Passive Reader/Writer
HMS827-03	Passive Reader/Writer with 18mm Tubular Remote Antenna
HMS827-04	Passive Conveyor Reader/Writer
HMS827-06	Passive Reader/Writer with 30mm x 40mm x 12mm Remote Antenna

Mechanical Dimensions



HMS827-05 Tubular Remote Antenna

