ESCORT MEMORY SYSTEMS

FastTrack™

RFID

FastTrack™ Series RFID Tags
LRP125(HT) / LRP250(HT)

Features
- High-Temperature Surviving RFID Tags
- No Batteries
- 25mm Diameter and 50 x 50mm Sizes
- No Moving Parts
- Easy to Mount
- Reusable or Disposable

Applications
- Paint Ovens
- Material Handling
- Manufacturing

Use With
- FastTrack™ Long-Range Conveyor Reader/ Writer (LRP820-04)
- FastTrack™ Long-Range DeviceNet Conveyor Reader/Writer (LRP830-04)
- FastTrack™ Long-Range Reader/Writer (LRP820-08)
- FastTrack™ Long-Range DeviceNet Reader/Writer (LRP830-08)

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!

EMS' FastTrack™ line of RFID Tags/Labels/PCBs and Reader/Writers (or Antennas) provides outstanding RFID solutions for demanding industrial environments. From scorching paint ovens to post office parcel tracking applications, the FastTrack™ family of RFID Tags/Labels/PCBs and Reader/Writers deliver on all of your data collection and tracking demands.

The FastTrack™ family of RFID Tags/Labels/ PCBs use Philips Semiconductor I-CODE chips, but most important, use EMS' unique, patented design and manufacturing technology to create the most advanced industrial RFID Tags.

EMS' reusable (or disposable) FastTrack™ Series Passive Read/Write RFID Tags, LRP125HT/ LRP250HT, are specifically designed for demanding manufacturing environments. The Tags are available in either a 25mm diameter or 50 x 50mm square versions. The Fast-Track™ Tags also feature normal temperature surviving Tags (LRP125 / LRP250) in addition to the high-temperature Tags (LRP125HT/ LRP250HT).

HIGH TEMPERATURE SURVIVING RFID TAGS

Long-Range Read and Write distances, Multiple-Tag-In-Field Read/Write technology, industrial Antennas, DeviceNet Reader/ Writers, RFID Labels, high-temperature disposable FLX Tags…EMS' FastTrack™ family of products is your RFID solution.

FastTrack™ – LRP125(HT)

Features

LRP125

Memory	48 Bytes
Data Transfer Rate	Read Speed 1200 Bytes/Second
	Write Speed 500 Bytes/Second
Operating Temperature	-4° to 185°F (-20° to 85°C)
Storage Temperature	-40° to 185°F (-40° to 85°C)
Protection Class	NEMA 6P/13 (IP68)

LRP125HT (High-Temperature)

Memory	48 Bytes
Data Transfer Rate	Read Speed 1200 Bytes/Second
	Write Speed 500 Bytes/Second
Operating Temperature	-40° to 200°F (-40° to 93°C)
Storage Temperature	-40° to 392°F (-40° to 200°C)
Protection Class	NEMA 6P/13 (IP68)

Note: Operating Temperature is the range of temperatures at which read, write and fill operations can be performed. Storage time prior to LRP125HT tag failure is not indefinite. Storage time must be established via testing in the actual working environment.

Mechanical Dimensions

.98 [24.9] DIA

ø.125 [3.2] DIA
82°C-SINK

.19 [4.8]
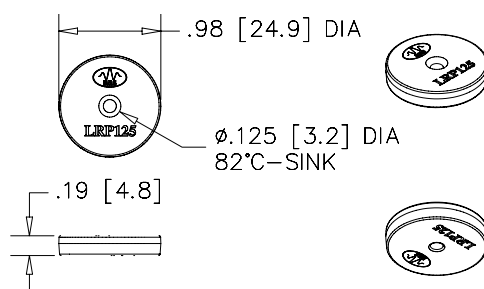
FastTrack™ – LRP250(HT)

Features

LRP250

Memory	48 Bytes
Data Transfer Rate	Read Speed 1200 Bytes/Second
	Write Speed 500 Bytes/Second
Operating Temperature	-4° to 185°F (-20° to 85°C)
Storage Temperature	-40° to 185°F (-40° to 85°C)
Protection Class	NEMA 6P/13 (IP68)

LRP250HT (High-Temperature)

Memory	48 Bytes
Data Transfer Rate	Read Speed 1200 Bytes/Second
	Write Speed 500 Bytes/Second
Operating Temperature	-40° to 200°F (-40° to 93°C)
Storage Temperature	-40° to 392°F (-40° to 200°C)
Protection Class	NEMA 6P/13 (IP68)

Note: Operating Temperature is the range of temperatures at which read, write and fill operations can be performed. Storage time prior to LRP250HT tag failure is not indefinite. Storage time must be established via testing in the actual working environment.

Mechanical Dimensions

2.00 [50.7]

2.00 [50.7]

.21 [5.3]

ø.192 [4.9] DIA
82°C-SINK
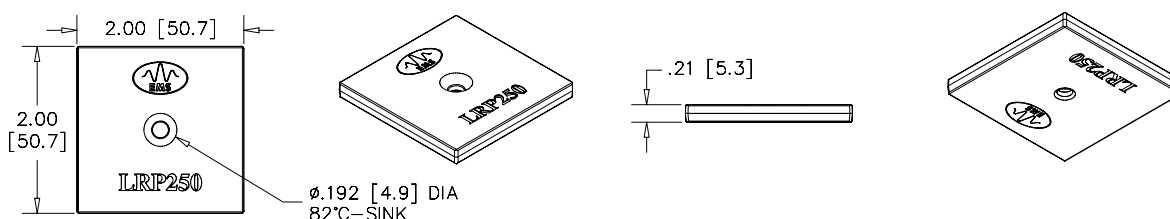
RFID Field and Read/Write Ranges

LRP820-04 / LRP830-04 Passive Reader/Writers (mounted between metallic rollers)

Reading & Writing Ranges with FastTrack™ Passive Read/Write TAGS

	LRP125(HT)	LRP250(HT)
Typical Range (Z) (inches/mm)*	2.50/64	7.00/178
Guaranteed Operating Range	2.00/51	6.00/152

LRP820-04 / LRP830-04 Passive Reader/Writers (free air/non-metallic environment)

Reading & Writing Ranges with FastTrack™ Passive Read/Write TAGS

	LRP125(HT)	LRP250(HT)
Typical Range (Z) (inches/mm)*	3.00/76	8.50/216
Guaranteed Operating Range	2.25/57	7.50/191

LRP820-08 / LRP830-08 Passive Reader/Writers

Reading & Writing Ranges with FastTrack™ Passive Read/Write TAGS

	LRP125(HT)	LRP250(HT)
Typical Range (Z) (inches/mm)*	8.00/203	17.00/432
Guaranteed Operating Range	7.00/178	15.00/381

Available Models

Model	Description
LRP125	Passive Read/Write Tag, 25mm diameter, 48 Bytes
LRP125HT	Passive Read/Write High-Temperature Tag, 25mm diameter, 48 Bytes
LRP250	Passive Read/Write Tag, 50 x 50mm, 48 Bytes
LRP250HT	Passive Read/Write High-Temperature Tag, 50 x 50mm, 48 Bytes

Compatible Products

Model	Description
LRP820-04	Long-Range Conveyor Reader/Writer
LRP830-04	Long-Range DeviceNet Conveyor Reader/Writer
LRP820-08	Long-Range Reader/Writer
LRP830-08	Long-Range DeviceNet Reader/Writer

Accessories

Model	Description
00-1127	Mounting Hardware Kit for LRP250HT, 10 Ceramic Spacers, 10 Screws

ESCORT MEMORY SYSTEMS
A DATALOGIC GROUP COMPANY

Passive Read/Write Radio Frequency Identification (RFID)
Typical & Guaranteed Read/Write Ranges

(inches/mm)*

Antennas		Tags		
		LRP820-08 / LRP830-08	LRP820-04 / LRP830-04 without metal	LRP820-04 / LRP830-04 with metal
LRP125(HT)	Typ.	8.00/203	3.00/76	2.50/64
	Guar.	7.00/178	2.25/57	2.00/51
LRP250(HT)	Typ.	17.00/432	8.50/216	7.00/178
	Guar.	15.00/381	7.50/191	6.00/152
LRP250HT-FLX	Typ.	17.00/432	8.50/216	7.00/178
	Guar.	15.00/381	7.50/191	6.00/152
LRP-P125	Typ.	8.00/203	3.00/76	2.50/64
	Guar.	7.00/178	2.25/57	2.00/51
LRP-P3858	Typ.	17.00/432	8.50/216	7.00/178
	Guar.	15.00/381	7.50/191	6.00/152
LRP-P5050	Typ.	17.00/432	8.50/216	7.00/178
	Guar.	15.00/381	7.50/191	6.00/152
LRP-L5555	Typ.	17.00/432	8.50/216	7.00/178
	Guar.	15.00/381	7.50/191	6.00/152
LRP-L4982	Typ.	17.00/432	8.50/216	7.00/178
	Guar.	15.00/381	7.50/191	6.00/152
LRP-L2666	Typ.	16.00/406	7.00/178	6.00/152
	Guar.	13.00/330	6.00/152	5.00/127
LRP-L90140	Typ.	25.00/635	12.00/305	9.00/229
	Guar.	22.00/559	11.00/279	8.00/203

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