ESCORT MEMORY SYSTEMS
A DATALOGIC GROUP COMPANY

PassThru

Long-Range Reader/Writer

LRP2000-23 *PassThru*

Features

- Read and Write to Dozens of Tags Simultaneously (Multiple-Tag-In-Field)
- Industrial Strength Reader/Writer (IP66)
- Large Read/Write Area
- International Recognized Frequency of 13.56 MHz
- RS422 Bus Interfaces
- Four Industrial Input Points and Four Output Points

Applications

- Automotive
- Parcel/Baggage Handling
- Manufacturing

Use With

- FastTrack™ Series Passive Read/Write ISO15693 Labels
- Any RS232 or RS422 Hosts and Ethernet

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 seventeen 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 Long-Range Reader/Writer (LRP2000) is part of the FastTrack™ RFID family of Reader/Writers. The LRP2000 PassThru can read multiple tags placed on items stacked on a pallet to a height of 2.5 feet off the ground at a distance of up to 8 feet between adjacently mounted antennas (Depending on tag size). Item level tracking is now a reality through out the supply chain. This system provides the RFID user community the environmental benefits associated with using the universally accepted ISO15693 standard at 13.56 MHz, regardless of whether the items are liquid based or located at the center of a palletized stack. The ISO15693 standard enables reader/writers and RFID labels from multiple suppliers to be interoperable, protecting against proprietary solutions. In conforming to both FCC and CE, the PassThru system can be used throughout Europe, North America and other regions of the world, which is a must for Multi-National Corporations.

The LRP2000 reader features synchronization ports to allow a second reader and antenna to operate nearby without interference. Pairs of readers and antennas may be networked together to form multiple gates. This technology provides the solution to numerous warehouse and logistic problems. In the case of an order picking operation, all items required to fill an order can be written to a master tag located on the pallet. After the items are picked, their RFID labels can then be read and compared to the master tag (or compared to an electronic shipping manifest). As the forklift passes through the dock door, if the items do not match their intended list, immediately a light or alarm can be triggered to notify those concerned.

READ MULTIPLE TAGS UP TO 8′ – WIDEST AISLE EVER!

This industrial strength Antenna enclosure is rated to be water resistant and dust proof for indoor and outdoor applications. The controller box is rated IP66 and is equipped with four input and output control lines. Sensors, light towers and photo eye switches can be directly hooked up to the LRP controller greatly reducing wiring installations to the host PC/PLC.

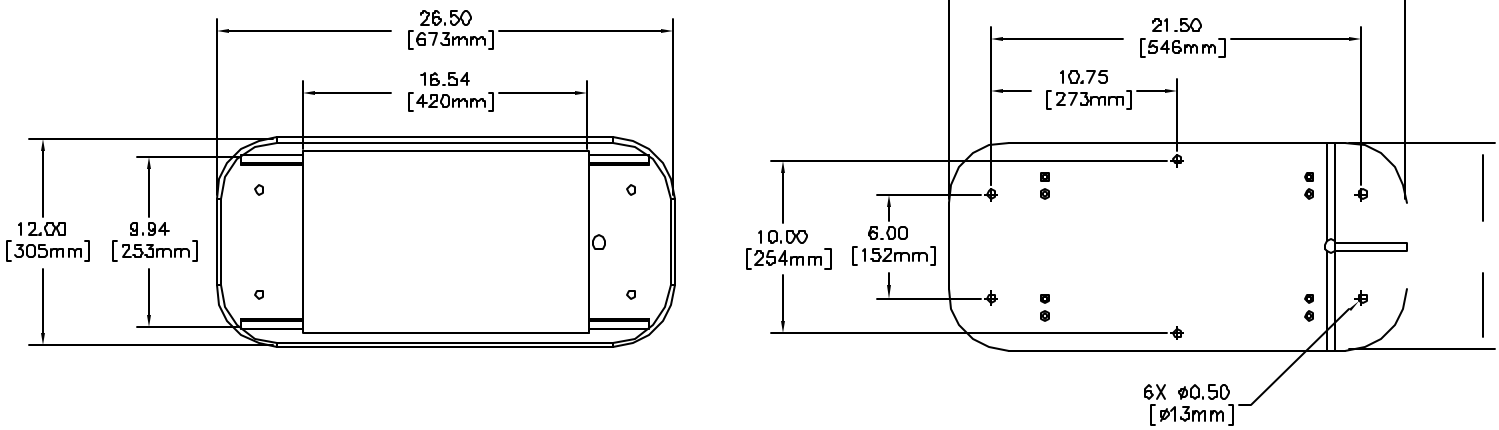
The LRP2000 completes the FastTrack™ family of Reader/Writers. You can use the LRP75 (Supplier), LRP820 Series (Manufacturing), LRP2000 (Logistics) and the LRP7400 (Retail) with the same ISO15693 tag throughout the Supply Chain.

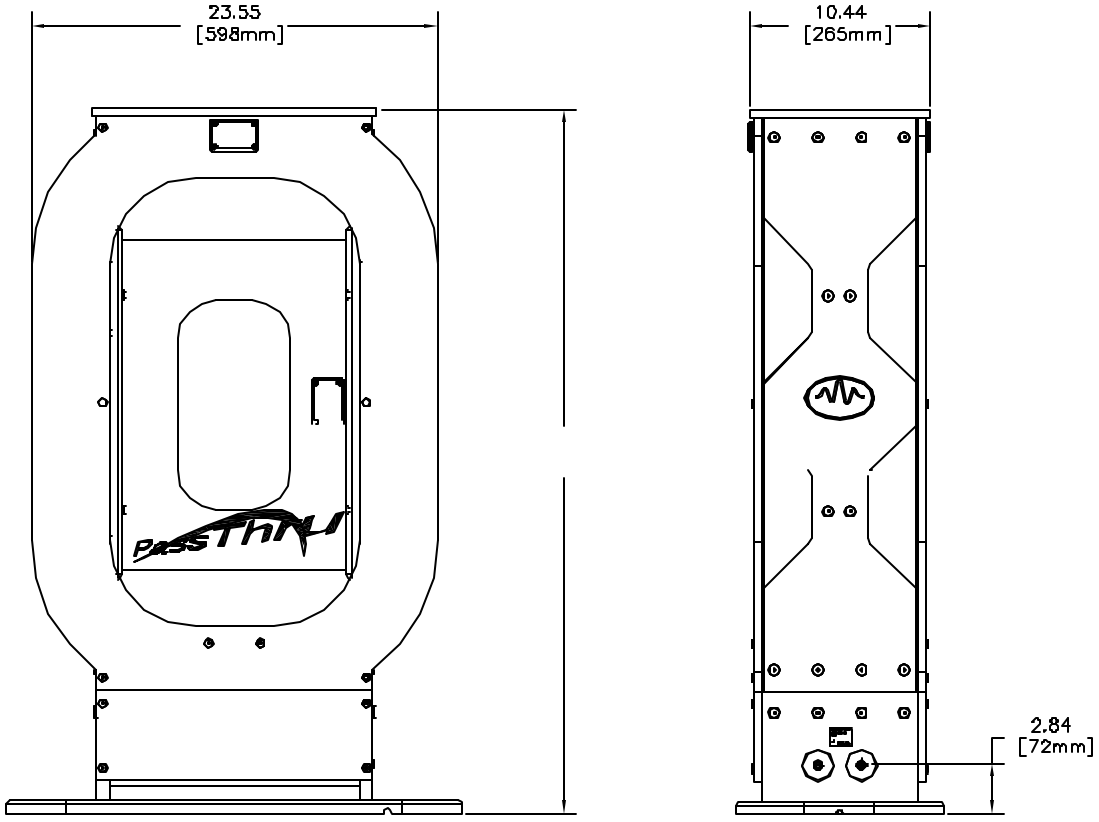
FastTrack™ Long-Range Reader/Writer
LRP2000-23

Electrical	Supply Voltage	24-28Vdc (As measured at the reader terminals)
	Power Consumption	Up to 56W (2.0A @ 28Vdc)
Memory	60KB Program Memory (System) 16KB Data Read/Write Memory 96KB Paged Data Read/Write Memory (32KB x 3)	
RFID Interface	LRP2000 Long Range Reader/Writer, 36ft. Dual Coax Cable to Remote Antenna	
Interface	**COM1**	
	RS232	
	RS422	
	Ethernet to control one LRP2000	
	COM2	
	RS232	
	Baud Rate	
	RS232/RS422 (COM1)	1200, 2400, 4800, 9600, 19200, 38400 bps
	RS232 (COM2)	1200, 2400, 4800, 9600, 19200 bps
	Inputs	
	Four Industrial-Level Inputs	
	Voltage Input Range	4.5 – 30Vdc
	Imax	25mA
	Output	
	Four Industrial-Level Outputs	
	Vmax	30 Vdc
	Imax	500mA
Mechanical Specifications	**LRP2000 Dimensions**	
	(L x W x H)	16.00 x 9.00 x 4.50in. (40.0 x 23.0 x 11.1cm)
	Weight	10.73lbs. (4.9kg)
	Enclosure	Cast Aluminum Alloy
	Pass-Thru Antenna	
	(L x W x H)	27.50 x 9.94 x 41.02in. (69.8 x 25.3 x 104cm)
Environment	Operating Temperature	32° to 120°F (0° to 49°C)
	Storage Temperature	-41° to 158°F (-20° to 70°C)
	Humidity	95% Non-Condensing
	Vibration Resistance	IEC 68-2-6 Test FC 1.5mm 10 to 55Hz: 2 Hours each Axis
	Shock Resistance	IEC 66-2-27 Test EA 30g; 11 msec: 3 Shocks each Axis
	Protection Class	NEMA 4 (IP66)
Pass-Thru Antenna Spacing	Minimum Antenna to Antenna Spacing 4ft. Minimum Antenna Spacing from Metal 3ft.	

Note: Tag ranges are approximate and will vary. Range will vary with different tags and application environment. It is the users responsibility to verify system performance is adequate for a particular application.

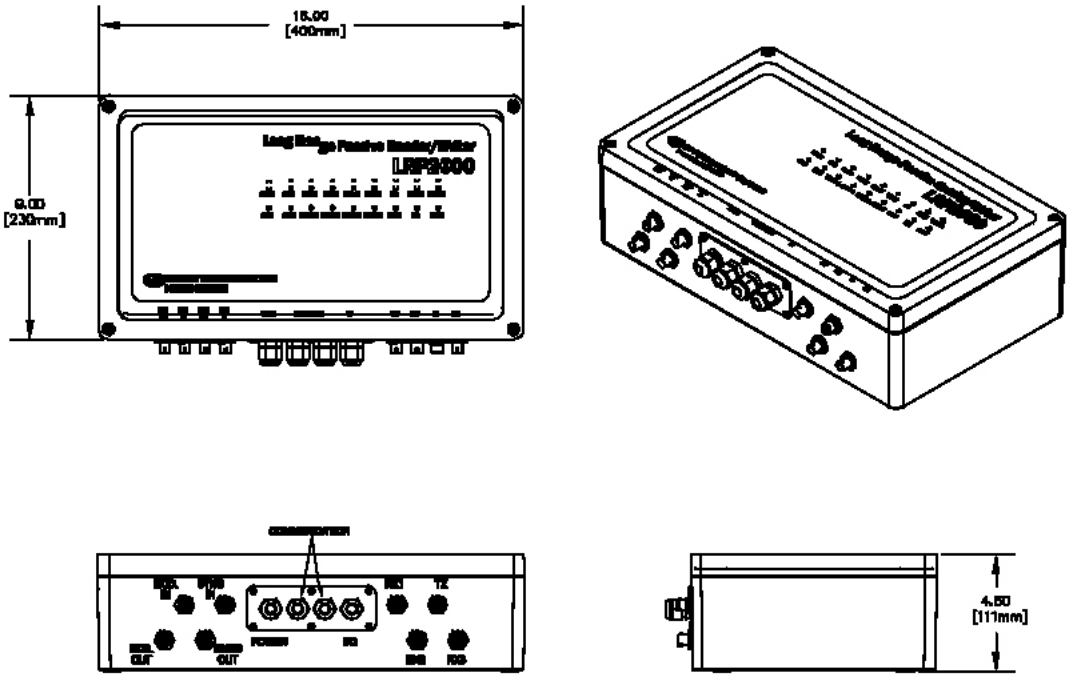
LRP2000-23 Antenna –Mechanical Dimensions



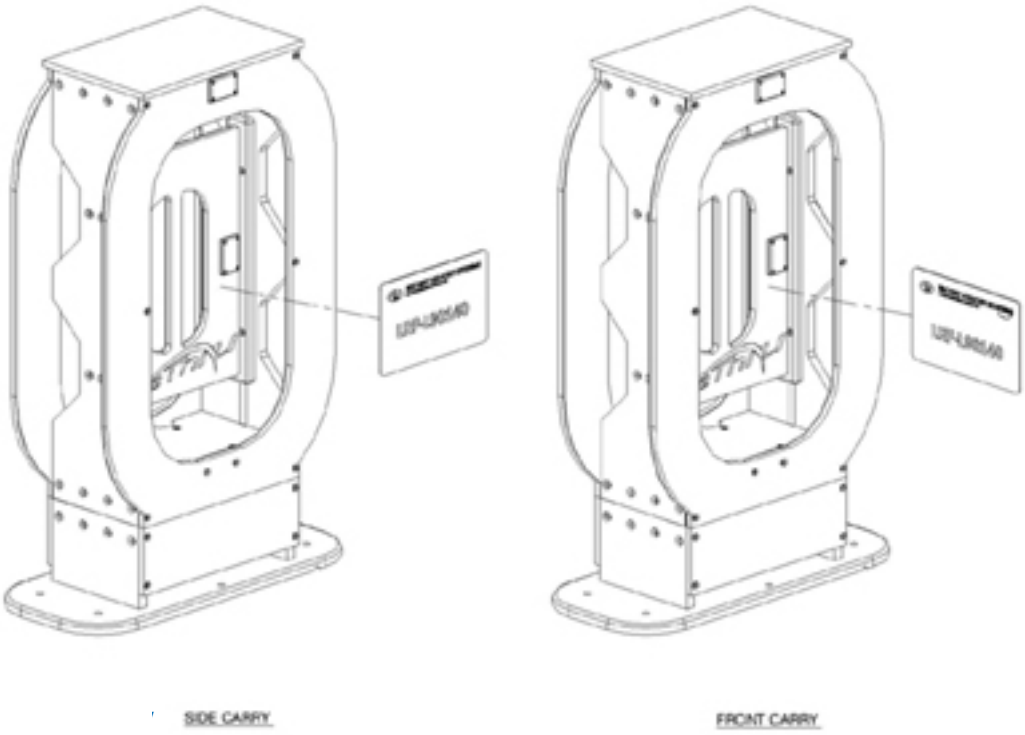


FastTrack™ Long-Range Reader/Writers
LRP2000-23

LRP2000 Controller – Mechanical Dimensions



Front/Side Carry



RFID Field and Read/Write Ranges

LRP2000 (Front Carry/Side Carry)

Reading & Writing Ranges with FastTrack™ Long-Range Read/Write ANTENNAS

	LRP-L4982S	LRP-L90140S
Typical Range (Z) feet(cm)*	4′ (122)	7′ (213)
Guaranteed Operating Range	3.5′ (107)	6′ (183)

LRP2000 (Side Carry only)

Reading & Writing Ranges with FastTrack™ Long-Range Read/Write ANTENNAS

	LRP-L4982S	LRP-L90140S
Typical Range (Z) feet(cm)*	5′ (152)	8′ (244)
Guaranteed Operating Range	4.5′ (137)	7′ (213)

* Proximity to metal, CRT devices and other sources of electromagnetic radiation may affect the range of the Antenna.. Ranges listed reflect GATE configuration.

Accessories

Model	Description
00-1142	Power Supply – USA
00-1144	Power Supply – Euro (Power Cord Plug Configuration for Germany)
CBL-1476	Synchronization Cable
00-1145	Connector Kit
17-1050	Manual, LRP2000