Lyngsoe Systems

elevating logistics

Passive and Active RFID Portal

LS4200, LS4202, LS4210, LS4220, LS4230

The LS4200 series Quick Mount Portals are integrated, active and ISO 18000-6C EPC Gen2 compliant passive RFID stand-alone portals designed to cover strategic congestion points such as entrances, exit gates, conveyors, sorting machines, etc. The portals read active tags and passive EPC Gen2 tags. When active or passive tags pass a portal, their unique tag IDs are read. This information and the exact time of reading and the portal ID number, indicating portal location / position, are subsequently transmitted to a server through a LAN or GSM/3G connection.

For complex applications the portals will accommodate the connection of two additional external passive EPC Gen2 compliant patch antennas, which may be required to achieve satisfactory reading rates. The portals are designed for quick mount installation. The portals are I/O enabled for direct connection of e.g. horn, lamp, sensor etc. for e.g. load control or tag detection. They also have a number of built-in watchdog functions for diagnostic monitoring of the unit including automatic reset functions enabling optimum operation availability and uptime.

In addition, the LS4220 and LS4230 portals have a single board computer supporting embedded applications enabling control of on-site logistics execution such as load control on trucks.

BENEFITS

- Objective collection of track & trace information
- Enables process transparency
- Enables quality improvements
- Objective SLA documentation

FEATURES

- Based on open standards
- Easy to install
- Read multiple tags
- Industrial design
- Long MTBF
- Enables alarm activation
- Watchdog installed
- Compatible with existing active Lyngsoe technology

Technical specifications

GENERAL

Tag compatibility	All generations of active LS tags and passive EPC C1G2/ISO 18000-6C tags
Single board computer	SBC84620 500 MHz
Data communication	Ethernet and for LS4230: GSM, GPRS, HSDPA, Edge
GSM modem	Quad-band GSM 850/900/1800/1900Mhz and GPRS Multi Slot Class 10
Motion sensor	Yes, with on/off switch
Excitation range	Typically 9ft 10in x 9ft 10in when installed at 8 ft 2in height
Power supply	24V DC
Power consumption	max 2 Amps
User I/O	Solid state relay 100mA/0-24V
Relative humidity	95% non condensing
Operation temperature	-4F - +131F
Storage temperature	-31F to +158F
Conformity	FCC Part 15, I-ETS 300-220, I-ETS 300-330, RSS210
Dimensions	57" x 20" x 2"
Weight	24lb 4.01oz- 28lb 10.56oz

PASSIVE EPC GEN2 READER

Frequency	902MHz~928MHz(FCC) 920MHz~925MHz(CHN) 860MHz-868MHz(CE)
Protocol	ISO 18000-6C EPC Gen2

PASSIVE ANTENNAS

Number of antennas	Up to 4, electronically switched
Antenna beamwidth	65 degrees
Polarization	Circular right-hand or circular left-hand

LS RFID EXCITER

Power consumption	300 mA at 24 VDC
Carrier frequency	125 KHz
Modulation	ASK (On/Off keying)

LS RFID READER

Tag Technology	RF - active
Protocol	ISO 18000-1 standard
Receiver sensitivity	> -105 dBm at 12 db SINAD for 1 KHz modulation and 15 KHz total
Tag transmission frequency	433.92 MHz (ISM worldwide approved frequency)
Data read rate (tag to reader)	38.4 Kbps
Data memory capacity	32 KB

57"

20"

RoHS
Compliant

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