

## FCC Class II Permissive Change Request Letter

Date: October 19, 2023

To FCC:

**RE: FCC Permissive II Change Request for Company:** for Lyngsoe Systems Ltd **FCC ID: PQG-MERCURY6E-M**

We are submitting an application for a class II permissive change to the FCC approval of the Company name: Lyngsoe Systems Ltd, product description: LS-M6E-M Embedded RFID Module (FCC: **PQG-MERCURY6E-M**, Grant Date: 10/12/2023).

Limit the output power to 29 dBm.

Software Revision: V 1.0(NA)

Add Laird Antenna model S9028PCRJ / S9028PCLJ to approved list of antennae.

Antenna Type: Circular Polarized Patch

Antenna Gain: 6.9 dBi

Sincerely



Don Ferguson  
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## Addendum



### **S9028PCRJ36RTNB/ S9028PCLJ36RTNB**

#### **Mini RFID Panel Antenna 902-928 MHz**

S9028PCL antenna is a circularly polarized panel antenna that provides reception and transmission of signals in the 902-928 MHz frequency band. Laird's industry-renowned design methodology achieves maximum efficiency and performance across the entire frequency band.

Both VSWR and axial ratios are excellent and allow the user to achieve the maximum performance for an antenna of this type. The antenna is housed in a heavy duty radome enclosure that can be directly wall mounted, An optional articulating mount allows either wall or mast mounting.

The antenna is offered with an integrated coax pigtail and a variety of connector types are available.

#### **FEATURES AND BENEFITS**

- Low profile
- Extremely low VSWR and axial ratio
- Weather and UV resistant radome
- Wide range of connector and cable options
- Left hand and right hand CP versions

#### **APPLICATIONS**

- Warehouse
- Distribution center
- Airports and hospitals
- Transit terminals
- Conveyor belt

#### **ELECTRICAL SPECIFICATIONS**

Antenna Model	S9028PCRJ / S9028PCLJ
Operating Frequency (MHz)	902 - 928
VSWR - Max	1.3:1
Gain (dBi)	9
Max Gain (dBi)	6.9
Nominal Impedance (Ohms)	50
Max Power - Ambient 25°C (W)	10
Polarization	Circular Right or Left
Azimuth Plane 3 dB Beamwidth	70°
Front-to-Back Ratio (dB)	20
Axial Ratio - Typical (dB)	1.0

DATA AND DEVICES / S9028PCRJ36RTNB / S9028PCLJ36RTNB

#### MECHANICAL SPECIFICATIONS

Dimensions – length x width x height – mm (Inches)	259 x 259 x 33.53 (10.2 x 10.2 x 1.32)
Weight – kg (lbs.)	1.04 (2.3)
Mounting Style	Threaded Stud
Radome Material	White High Strength PC
Lightning Protection	DC Grounded
Connector Type	36" Coax Pigtail, Rev TNC Male

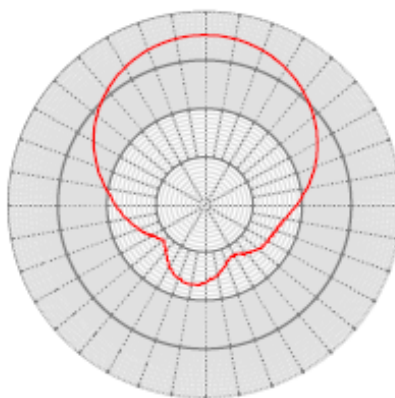
#### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature – °C (°F)	-25 to +70°C (-13 to +158°F)
Ingress Protection Rating	IP54

#### CONFIGURATION

PART NUMBER	POLARIZATION	CONNECTOR
S9028PCRJ36RTNB	RHCP	Coax Pigtail, 36", Rev TNC Male
S9028PCLJ36RTNB	LHCP	Coax Pigtail, 36", Rev TNC Male

#### RADIATION PATTERNS



**915 MHz**

#### TE TECHNICAL SUPPORT CENTER

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