LoRa

ST0628-40-501-B

Datasheet

Amphenol

LoRa 868MHz & 915MHz

External / in-building

Features:

High performing LoRa antenna with SMA connector for indoor applications. Also, it complies with EU & US specification.

Applications:

- CPE Router, Set-top boxes & Gateway
- IoT devices
- Sigfox
- LoRa
- LPWAN
- RFID
- Remote Monitoring
- Healthcare



| Electrical Specifications | | | | | | | | | |
|---------------------------|-------------------|---------|--------------|------------------|---------|-----------|--|--|--|
| Antenna Characteristics | | | | | | | | | |
| Antenna Type | Radiation Pattern | | Polarization | Max. Input Power | | Impedance | | | |
| Stick Antenna | Omni | | Linear | 1W | | 50Ω | | | |
| | | | | | | | | | |
| Frequency (MHz) | | 860~876 | | | 902~928 | | | | |
| Return Loss (dB) | | < -10 | | | < -10 | | | | |
| Peak Gain (dBi) | | 3.0 | | | 2.4 | | | | |
| Average Gain (dB) | | -2.0 | | | -1.5 | | | | |
| Efficiency (%) | | 63 | | | 71 | | | | |



Stick Antenna



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Mechanical Specifications

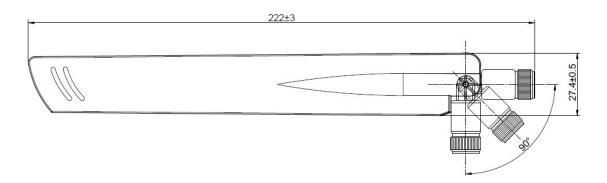
| Mechanical | | | | | |
|----------------|---------------|--|--|--|--|
| Dimension (mm) | 222.0 | | | | |
| Connector Type | RP-SMA (Plug) | | | | |
| Material | ABS | | | | |
| Weight (g) | 34.5 | | | | |

| Environmental | | | | | |
|------------------------|----------------------------|--|--|--|--|
| Temperature Range (°C) | -30 to 75 | | | | |
| Humidity | Non-condensing 65°C 95% RH | | | | |
| RoHS Compliant | | | | | |

Mechanical Drawing

Unit : mm





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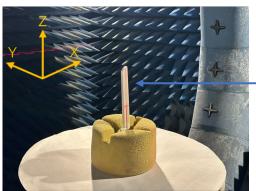
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Charts In Free Space

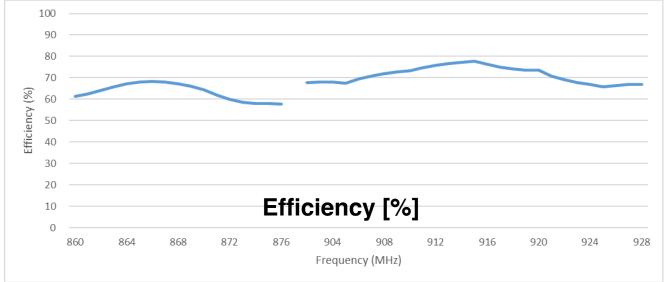


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Test setup, measurement performed in 3D anechoic chamber.



Blue background represents frequency response.

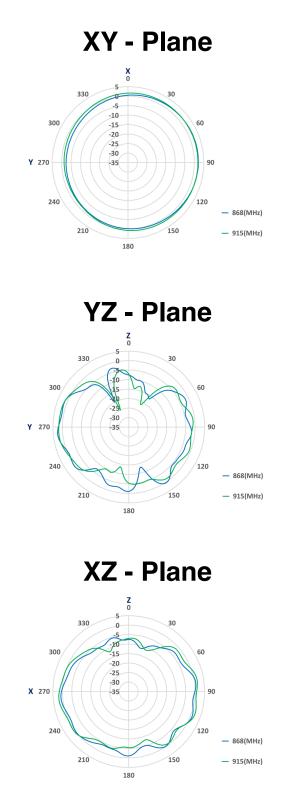




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Radiation Pattern - Free Space





| Revisions | | | | | | |
|-----------|-----------------|------------|----------------------|----------|--|--|
| Rev. | Description | Date | ECN | Approval | | |
| А | Initial Release | 2023-02-20 | ST0628-40-501-B-RA00 | ATC | | |

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