

# Data Sheet

## 868 MHz Antennas (HSA-868XXX)

### ISM/LoRa 868 MHz antennas

Product	Frequency range	VSWR	Gain	Polarization type	Rated power	Input impedance
HSA-868MS1	868 MHz	≤ 2.0	5 dBi	vertical	100 W	50 Ω
HSA-868PCB	868 MHz	≤ 2.0	4 dBi	vertical	50 W	50 Ω
HSA-868TEB	868 MHz	≤ 2.0	2 dBi	vertical	50 W	50 Ω
HSA-868TEB2	868 MHz	≤ 2.0	2 dBi	vertical	50 W	50 Ω
HSA-868TFF	868 MHz	≤ 2.0	2 dBi	vertical	50 W	50 Ω

Product	Connector	Antenna length	Radiator	Working temperatures	Weight
HSA-868MS1	SMA male	Ø28x299 mm	Cuprum	-40°C~+60°C	57 g
HSA-868PCB	IPEX	Ø9x34 mm	Cuprum	-40°C~+60°C	3 g
HSA-868TEB	SMA male	Ø7.8x51 mm	Cuprum	-40°C~+60°C	6 g
HSA-868TEB2	SMA male	Ø7.8x48 mm	Cuprum	-40°C~+60°C	6 g
HSA-868TFF	SMA male	Ø10x108.5 mm	Cuprum	-40°C~+60°C	12 g

### HSA-868MS1

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**Electrical specifications:**



- Frequency range: 868 MHz
- VSWR:  $\leq 2.0$
- Gain: 5 dBi
- Polarization type: vertical
- Rated power: 100 W
- Input impedance: 50  $\Omega$

**Mechanical specifications:**



- Connector: SMA male
- Antenna length:  $\varnothing 28 \times 299$  mm
- Radiator: Cuprum
- Working temperatures:  $-40^{\circ}\text{C} \sim +60^{\circ}\text{C}$
- Humidity: 5%-95% RH
- Weight: 57 g

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# HSA-868PCB

	<p><b>Electrical specifications:</b></p> <ul style="list-style-type: none"><li>• Frequency range: 868 MHz</li><li>• VSWR: <math>\leq 2.0</math></li><li>• Gain: 4 dBi</li><li>• Polarization type: vertical</li><li>• Rated power: 50 W</li><li>• Input impedance: 50 <math>\Omega</math></li></ul> <p><b>Mechanical specifications:</b></p> <ul style="list-style-type: none"><li>• Radome materials: PCB</li><li>• Connector: IPEX</li><li>• Antenna length: <math>\varnothing 9 \times 34</math> mm</li><li>• Radiator: Cuprum</li><li>• Working temperatures: <math>-40^{\circ}\text{C} \sim +65^{\circ}\text{C}</math></li><li>• Weight: 3 g</li></ul>
	



# HSA-868TEB

	<p><b>Electrical specifications:</b></p> <ul style="list-style-type: none"><li>• Frequency range: 868 MHz</li><li>• VSWR: <math>\leq 2.0</math></li><li>• Gain: 2 dBi</li><li>• Polarization type: vertical</li><li>• Rated power: 50 W</li><li>• Input impedance: 50 <math>\Omega</math></li></ul> <p><b>Mechanical specifications:</b></p> <ul style="list-style-type: none"><li>• Radome materials: plastic</li><li>• Connector: SMA male</li><li>• Antenna length: <math>\varnothing 7.8 \times 51</math> mm</li><li>• Radiator: Cuprum</li><li>• Working temperatures: <math>-40^{\circ}\text{C} \sim +60^{\circ}\text{C}</math></li><li>• Humidity: 5%-95% RH</li><li>• Weight: 6 g</li></ul>
	

# HSA-868TEB2

	<b>Electrical specifications:</b> <ul style="list-style-type: none"><li>• Frequency range: 868 MHz</li><li>• VSWR: <math>\leq 2.0</math></li><li>• Gain: 2 dBi</li><li>• Polarization type: vertical</li><li>• Rated power: 50 W</li><li>• Input impedance: 50 <math>\Omega</math></li></ul> <b>Mechanical specifications:</b> <ul style="list-style-type: none"><li>• Radome materials: plastic</li><li>• Connector: SMA male</li><li>• Antenna length: <math>\varnothing 7.8 \times 48</math> mm</li><li>• Radiator: Cuprum</li><li>• Working temperatures: <math>-40^{\circ}\text{C} \sim +60^{\circ}\text{C}</math></li><li>• Humidity: 5%-95% RH</li><li>• Weight: 6 g</li></ul>
	

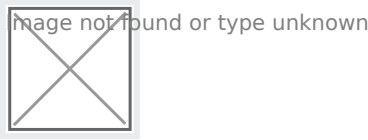
# HSA-868TFF

	<b>Electrical specifications:</b> <ul style="list-style-type: none"><li>• Frequency range: 868 MHz</li><li>• VSWR: <math>\leq 2.0</math></li><li>• Gain: 2 dBi</li><li>• Polarization type: vertical</li><li>• Rated power: 50 W</li><li>• Input impedance: 50 <math>\Omega</math></li></ul> <b>Mechanical specifications:</b> <ul style="list-style-type: none"><li>• Radome materials: plastic</li><li>• Connector: SMA male</li><li>• Antenna length: <math>\varnothing 10 \times 108.5</math> mm</li><li>• Radiator: Cuprum</li><li>• Working temperatures: <math>-40^{\circ}\text{C} \sim +60^{\circ}\text{C}</math></li><li>• Humidity: 5%-95% RH</li><li>• Weight: 12 g</li></ul>
	

# Additional notes

Related information and links		
<a href="#">Ordering information</a>	<a href="#">Accessories</a>	<a href="#">Similar products</a>

# Products family sample photo



<https://redisage.com>

## DISCLAMER NOTES

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

## Datasheet-ID:

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