

OnBoard™ SMD GSM/NB-IoT

Antenna for embedded products on the cellular GSM UMTS(3G) and NB-IoT bands.

The OnBoard SMD concept offers features like:

- SMD compatibility
- Tape on reel delivery
- Low loss material
- PCB on-ground implementation
- Simple fine tuning by matching network
- RoHS compliance
- Low cost



Technical data

Part number	PRO-OB-572	
Frequency	791-960 MHz, 1710-2170 MHz	
Impedance	50 Ω	
Return loss	< -6 dB	
Total efficiency	> 77% (-1.1 dB)	824-960 MHz
	> 66% (-1.8 dB)	791-960 MHz
	> 65% (-1.9 dB)	1710-2170 MHz
	> 70% (-1.5 dB)	791-960MHz ¹
Dimensions	50 x 25 x 10 mm (1.969 x 0.984 x 0.394 in)	
Assembly	Pick and place	
Soldering	Reflow or equivalent	
Packing	Tape and reel	
Temperature	-40 to +125 ⁰ C	
RoHS status	Compliant with EU directive 2011/65/EU (RoHS 2)	
Shelf life	10 years	
MSL	Level 1, unlimited	
Mechanical resistance ²	Immunity to vibrations IEC/EN 60068-2-6, Fc test Immunity to shock IEC/EN 60068-2-27, Ea test	

Note: Above specification is valid on the Proant evaluation board. See related application note for more information.

1) When optimized for NB-IoT band 8 and band 20 (791-960MHz)

2) The product has been tested according to the standard IEC 60721-3-5 – Class 5M3 (road vehicles in areas without well-developed road systems, light-weighted vehicles, tracked vehicles and self-propelled machines)

Patent: SE537042 + Pending