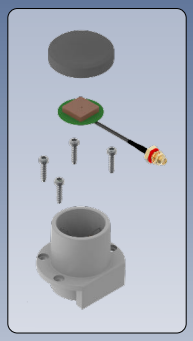
Head Office and Facilities
Via Liguria, 15 - 46049 Volta Mantovana (MN) ITALY
Tel. +39 0376 801515 - https://www.sirioantenne.it
mail: sales@sirioantenne.it - info@sirioantenne.it

GPS + 868MHz & Cellular 5G Combined Antenna



GPS Antenna



5G Antenna

Synchronization is the heartbeat of every critical infrastructure. Whether your challenge is ultra-broadband speed or long-range coverage, our new integrated solutions fuse data transmission and GPS timing into **a single, high-performance unit.**

868MHz / 5G Cellular + GPS Antenna

Engineered for urban density and ultra-low latency.

- Performance: Optimized for 868MHz, mmWave and Sub-6GHz bands.
- Precision: Integrated GPS for network clock synchronization
- Target: Smart Cities, Industry 4.0, and Private 5G Networks.

WHY CHOOSE GPS Combined Antenna?

- Zero Interference: The internal design prevents data transmission from disrupting sensitive satellite reception.
- Smart Installation: One mount, one alignment, dual functionality. Drastically reduces tower footprint and cabling complexity.
- Mission-Critical Reliability: Built to industrial standards for 24/7 operation in extreme weather conditions (IP67 rated).

Electrical Data

	868MHz + Cellular 5G	GPS
Type	Wide Band Dipole	Ceramic Chip
Frequency Range	650 ÷ 960MHz, 1.7÷ 2.7GHz, 3.3 ÷ 4.2GHz, 4G-5G bands	1550 ÷ 1606MHz, GPS/GLONASS/QZSS /Galileo
Impedance	50 ohm	50 ohm
Radiation	Omnidirectional	Hemispherical
Polarization	Linear vertical	RHCP
Antenna Gain	650 ÷ 960MHz=2.1dBi 1.7 ÷ 4.2GHz=4 - 6dBi	3 dBi (approx)
Preamplifier GPS:		
Amplifier gain:		28dB @ 5Vdc
Voltage		3-5 VDC
Current Consumption		10 mA (approx)
Noise figure:		< 1,8dB

Mechanical data

Housing& radome materials	Fiberglass, aluminium, molded plastic
Bracket & hardware materials	molded plastic, stainless steel
Dimensions (approx)	370x200x90 mm
Bracket Length (approx)	200mm
Ingress protection	IP67
Installation type	Pole: Ø 35 ÷ 60 mm

MADE IN ITALY Since 1972

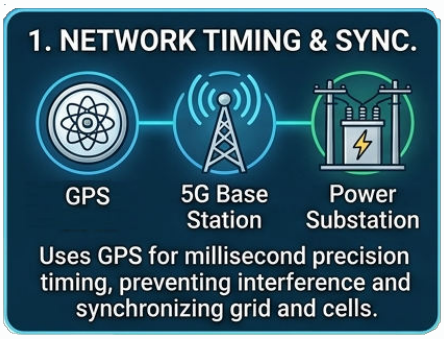
Head Office and Facilities
Via Liguria, 15 - 46049 Volta Mantovana (MN) ITALY
Tel. +39 0376 801515 - https://www.sirioantenne.it
mail: sales@sirioantenne.it - info@sirioantenne.it

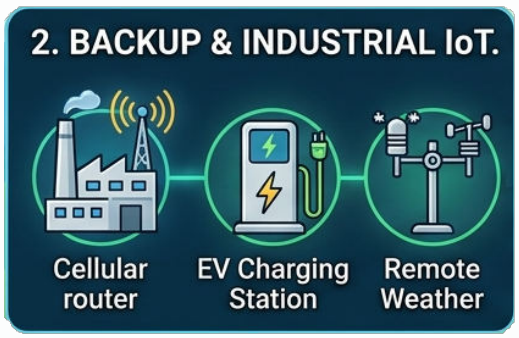
GPS + 868MHz & Cellular 5G Combined Antenna

Some Real-World Use Cases

- **Network Timing and Synchronization:** It receives the absolute time signal from satellites to synchronize 5G base stations, network nodes, or electrical substations down to the millisecond, preventing network interference and ensuring maximum accuracy for system logs.
- **Backup Connectivity and Industrial IoT:** It ensures continuous data connectivity (4G/5G) for industrial routers, EV charging stations, or isolated weather units, while simultaneously allowing the exact location of the fixed installation to be mapped on a centralized control dashboard.
- **Security, Anti-Theft, and Geofencing:** Even though the installation is fixed, the system constantly monitors its position. If a high -value asset (such as a street cabinet or a compact repeater) is removed or tampered with, it detects the displacement and uses the cellular network to instantly send a tracking alert.
- **Structural and Micro -movement Monitoring:** Ideal for deployments on dams, bridges, or landslide -prone areas. The system monitors millimeter-level structural stability over time, while the high-speed 5G network transmits sensor data in real time to control centers.

The practical advantage? An extremely clean installation. It requires only a single antenna body on the pole or metal cabinet, reducing visual impact, assembly times, and the risk of water ingress (thanks to the IP67 protection rating).









and more.....

MADE IN ITALY *Since 1972*