

SM601-SWBS(XX)(CWH-GPS) TRANSeon™ transport antenna, 2 in 1, GPS and LTE 694-2700MHz

- Wideband LTE port covers all bands from 694 to 2700 MHz with high RF efficiency
- Built-in high performance GPS module
- LSZH and fire retardant cable satisfies the most stringent safety standards
- Low profile and one 3/4" hole mount for easy installation

TRANSeon family is Sinclair's next generation transport/mobile antenna which features high RF performance and rugged design. Specifically, the SM601-SWBS(XX)(CWH-GPS) series is a 2 in 1 antenna. The RF port covers all the bands for 2G, 2.5G, 3G cellular, LTE 700-2600 MHz. The embedded GNSS antenna utilizes a high-performance LNA that offers outstanding performance. Rugged design with UV resistant radome and IP67 rating for reliability and long life in harsh environment. The compact size and low height profile of 1.95 inches allow it to blend easily in any environment and ideal for vehicle roof-top mounting. The 3/4" hole mount means allows for convenient mounting on a vehicle rooftop by drilling only one hole.



When ordering, please refer to below chart for detailed model# and connector configurations. Other options are also available, please contact your Sinclair Sales Representative or Customer Service Representative for more information.

| Model Number | LTE port | GPS port | Pigtal |
|-----------------------|----------|----------|---------|
| SM601-SWBSSM(CWH-GPS) | SMA(m) | SMA(m) | 1'/30cm |
| SM601-SWBSNF(CWH-GPS) | N(f) | SMA(m) | 1'/30cm |
| SM601-SWBSBF(CWH-GPS) | BNC(f) | SMA(m) | 1'/30cm |
| SM601-SWBSQF(CWH-GPS) | QMA(f) | SMA(m) | 1'/30cm |

When longer pigtail is needed, below extension cable is available upon request. Connector and cable length are fully customizable, call for details.

| | Model Number | Cable | Length (nominal) | Connector Ant-end | Radio-end |
|-----------|-----------------|---------|------------------|-------------------|-----------|
| LTE port: | AEC-11-500-SFSM | EF142 | 5m/17ft | SMA(f) + SMA(m) | |
| LTE port: | AEC-11-500-SFNF | EF142 | 5m/17ft | SMA(f) + N(f) | |
| LTE port: | AEC-11-500-SFQF | EF142 | 5m/17ft | SMA(f) + QMA(f) | |
| LTE port: | AEC-01-500-SFSM | RG58/U | 5m/17ft | SMA(f) + SMA(m) | |
| LTE port: | AEC-01-500-SFNF | RG58/U | 5m/17ft | SMA(f) + N(f) | |
| LTE port: | AEC-01-500-SFQF | RG58/U | 5m/17ft | SMA(f) + QMA(f) | |
| GPS port: | AEC-12-500-SFSM | EF316 | 5m/17ft | SMA(f) + SMA(m) | |
| GPS port: | AEC-03-500-SFSM | RG174/U | 5m/17ft | SMA(f) + SMA(m) | |



Note:
When mounted on a metal plane, such as vehicle rooftop, no ground plate is required. Otherwise a no less than 14 inches diameter grounding plane is needed.

| Region | United States | Europe, Middle East, and Africa | Canada, Caribbean, and Latin America | Asia-Pacific |
|-----------|-----------------------|---------------------------------|--|------------------------|
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| E-mail | salesusa@sinctech.com | salesuk@sinctech.com | salescan@sinctech.com | salesasia@sinctech.com |

Electrical Specifications

| | | | |
|-------------------------------|-----|------------------------|----|
| Frequency Range | MHz | 694 to 2700 | |
| Bandwidth | MHz | 2006 | *1 |
| Connector | | Various options avail. | *2 |
| Gain (typical) | dBi | 4-7 | *3 |
| Input VSWR (max) | | 1.5:1 | *4 |
| Polarization | | vertical | *5 |
| Impedance | Ω | 50 | *6 |
| Pattern | | Omni-directional | |
| Average Input Power (max) | W | 100 | *7 |
| Lightning protection | | DC ground | |
| GPS Frequency | MHz | 1575.42±10 | |
| GPS Polarization | | RHCP | |
| GPS Output Impedance | Ω | 50 | |
| GPS VSWR (max) | | 1.5:1 | |
| GPS Peak Gain | | >=4.5 dBi | |
| GPS Axial Ratio | dB | <=3 | |
| GPS Power Gain (typ) | dB | 30 | *8 |
| GPS Supply Voltage Range | VDC | 3 to 16 | |
| GPS Current Consumption (typ) | | 20 | |
| GPS Out of Band Rejection 1 | | >45dB @ <1525MHz | |
| GPS Out of Band Rejection 2 | | >45dB @ >1630MHz | |

Notes

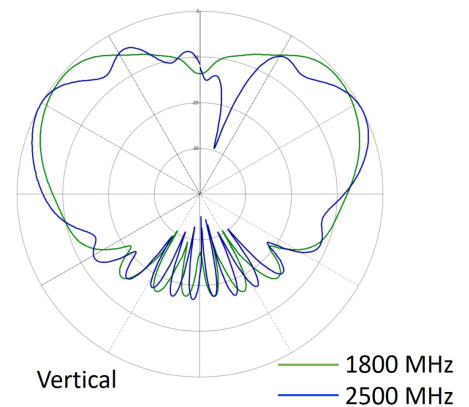
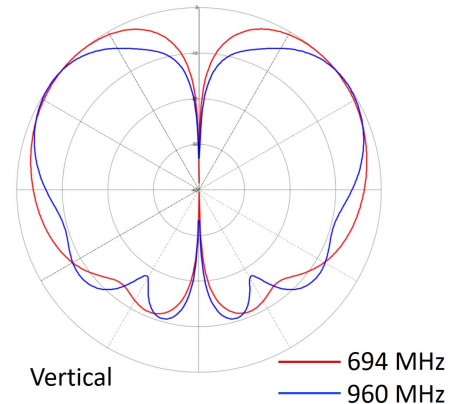
- *1 : Average efficiency >70%
- *2 : See previous page for details.
- *3 : On 14" metal ground plane.
- *4 : VSWR max 1.8:1 @ 694-746MHz
- *5 : RF port
- *6 : RF port
- *7 : RF port
- *8 : ±2 dB
- *9 : Flammability: EN 60332-1-2, UL 1581 § 1100, EN 50305, 9.1.2
- *10: After mounted following installation manual.

Mechanical Specifications

| | | | |
|------------------------|----------|-----------------------------|-----|
| Width | in (mm) | 5.75 (146) | |
| Depth | in (mm) | 5.75 (146) | |
| Height | in (mm) | 1.95 (50) | |
| Cable - LTE port | | EF142, LSZH, fire retardant | *9 |
| Cable - GPS port | | EF316, LSZH, fire retardant | |
| Radome material | | UV stabilized ABS, UL94 HB | |
| Base plate material | | aluminum | |
| Weight | lbs (kg) | 0.9 (0.41) | |
| Actual shipping weight | lbs (kg) | 1.35 (0.61) | |
| Shipping dimensions | in (mm) | 10.3x7.3x5.5 (262x185x140) | |
| Ground Plane (min) | in (mm) | 14 x 14 | |
| Radome Colour | | White | |
| Ingress protection | | IP67 | *10 |

Environmental Specifications

| | | |
|---|----------|--------------------------|
| Temperature range | °F (°C) | -40 to +140 (-40 to +60) |
| Wind Loading Area (Flat Plate Equivalent) | ft² (m²) | 0.06 (0.01) |
| Wind Loading Area (1/2" ice) | ft² (m²) | 0.07 (0.01) |
| Lateral Thrust (100 mph No Ice) | lbs (N) | 2.2 (9.8) |
| GPS Operating Temperature | °F (°C) | -22 to 140 (-30 to 60) |



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