

### KEY FEATURES

Swegeo HA20 is a multi-constellation and multi-frequency Helical GNSS antenna with eight-arm coupling and four-feed point technology that supports GPS, GLONASS, GALILEO, BEIDOU, QZSS, IRNSS, SBAS and L-Band.



#### SUPERIOR SATELLITE TRACKING & STABLE PHASE CENTER

- It fits into any application that requires a small size and lightweight antenna without sacrificing high performance in high-precision positioning, particularly in UAV, pocket-size RTK, handheld/tablet, or other portable system applications.

#### REDUCES THE SOURCES OF MEASUREMENT ERRORS

- Multi-arm spiral technology ensures high performance on right-hand circular polarization and phase center stability. It further lowers the measurement errors.

#### COMPACT & HIGH-PERFORMANCE DEVICE

- The overall design provides a high gain on low-elevation satellite signal reception so that a higher number of satellites are available for position calculation. It is small in size, lightweight, and easy to carry and install.

#### PERFORMS EXCEPTIONALLY WELL

- Built-in low-noise amplifier, two-stage filter, good out-of-band suppression strong anti-interference ability provide fully reliable antenna performance in harsh electromagnetic environments.

| GENERAL             |                       |
|---------------------|-----------------------|
| Architecture        | Quadrifilar Helix     |
| Signal Supported    | GPS: L1/L2/L5         |
|                     | GLONASS: G1/G2/G3;    |
|                     | BEIDOU B1/B2/B3       |
|                     | GALILEO E1/E5a/E5b/E6 |
|                     | QZSS L1/L2/L5         |
|                     | IRNSS L1/L2/L5        |
|                     | SBAS L1/L2/L5         |
|                     | L-Band                |
| Nominal Impedance   | 50 $\Omega$           |
| Polarization        | RHCP                  |
| Axial Ratio @zenith | $\leq 1.5$ dB         |
| Gain @zenith        | $\geq 2.0$ dBi        |

| LNA               |                             |
|-------------------|-----------------------------|
| Frequency Range   | 1164MHz~1278MHz             |
|                   | 1525MHz~1606MHz             |
| LNA Gain          | 35 $\pm$ 3.0dB (Typ. @25°C) |
| Noise Figure      | $\leq 1.5$ dB@25°C , Typ.   |
| Output VSWR       | $\leq 1.8:1$ typ. 2.0:1max  |
| Operation Voltage | 3.0-6.0 VDC                 |
| Operation Current | $\leq 45$ mA                |

| ENVIROMENTAL          |                    |
|-----------------------|--------------------|
| Operating Temperature | -40°C to +85°C     |
| Storage Temperature   | -45°C to +85°C     |
| Humidity              | 95% Non-condensing |
| Ingress Rating        | IP67               |

| MECHANICAL |                                         |
|------------|-----------------------------------------|
| Dimensions | $\Phi 27.5$ mm*55.6 mm                  |
| Connector  | SMA-J                                   |
| Weight     | 18 gram                                 |
| Radome     | ABS+PC                                  |
| Attachment | screws on base                          |
| Vibration  | 3 axis,sweep=15min,10 to 200Hz sweep:3G |
| Shock      | Vertical axis:50G,other axes: 30G       |

### MECHANICAL DRAWING (MM)

