



## TOPCON CR-G3 Choke Ring Antenna

TOPCON CR-G3 antenna offers GPS L1, GPS L2, GPS L5 signal reception as well as GLONASS L1 and L2 bands. It gives customer an opportunity to use both constellations in precision geodetic applications. Enhanced characteristics due to newly-designed choke-ring.

**High durability and all-weather design.**



Performance	Physical and electrical
<p><b>Operating frequency range</b>            L1 GPS/GLONASS - 1586.5 ± 25 MHz,            L2 GPS/GLONASS - 1236 ± 20MHz            L5 GPS - 1176 ± 12 MHz</p> <p><b>Out-of-Band Rejection</b>            L1 ± 100 MHz -30 dBc (typical)            L2 ± 100 MHz -60 dBc (typical)</p> <p><b>LNA Gain CR-G3:</b> 25 dB ± 5 dB (typical)            : 45 dB ± 5 dB (optional)</p> <p><b>Gain at Zenith (90°)</b>            GPS L1 7 dBic (minimum)            GPS L2 7.5 dBic (minimum)            GPS L5 6 dBic (minimum)            GLONASS L1 5.5 dBic (minimum)            GLONASS L2 6 dBic (minimum)</p> <p><b>Gain Roll-Off (from Zenith to Horizon)</b>            GPS L1 -15.5 dB            GPS L2 -18.5 dB            GPS L5 -18 dB            GLONASS L1 -15.5 dB            GLONASS L2 -18.5 dB</p> <p><b>Noise Figure</b> 1,8 dB (typical)</p> <p><b>VSWR</b> ≤ 2.0 : 1</p> <p><b>Differential Propagation Delay (typical)</b>            L1 – 1.5 ns,            L2 – 3 ns,            L5 – 1 ns</p> <p><b>Nominal Impedance</b> 50 Ohm</p>	<p><b>Size</b></p> <p><b>Diameter</b>            380 mm (Antenna without Anti-snow dome)            380 mm (with TOPCON Anti-snow Spherical dome)            415 mm (with SCIGN Anti-snow short dome)</p> <p><b>Height</b>            138.5 mm (Antenna without Anti-snow dome)            292 mm (with TOPCON Anti-snow Spherical dome)            287 mm (with SCIGN Anti-snow short dome)</p> <p><b>Weight</b>  <b>4.7 kg</b> Antenna            1.1 kg TOPCON Anti-snow Spherical dome  <b>5.8 kg</b> Antenna with TOPCON Anti-snow Spherical dome            1.8 kg SCIGN Anti-snow short dome  <b>6.5 kg</b> Antenna with SCIGN Anti-snow short dome</p> <p><b>Power</b>            Input Voltage +3 to +18 VDC            Current Consumption : 30 mA (typical)</p> <p><b>Connector</b> N female</p> <p><b>Environmental</b></p> <p><b>MIL-STD-810F:</b>  <b>Temperature</b> (Methods 501.4, 502.4)            Operating Range -50°C to +70°C            Storage Range -55°C to +85°C</p> <p><b>Humidity, 95%</b> (Method 507.4)</p> <p><b>Salt Fog, 5%</b> (Method 509.4)</p> <p><b>Vibration</b> - Category 20, Composite            Wheeled/Tracked Machine Exposure, along each of 3 axes (Method 514.5, Table 514.5C-VII and Figure 514.5C-3)</p> <p><b>Mechanical Shock</b>, along each of 3 axes (Method 516.4, Procedure I, Functional Shock, Table 516.5-II, Figures 516.5-10 - accelerative forces up to 40g)</p> <p><b>Waterproof</b> IEC 60529 IPX7  <b>Dustproof</b> IEC 60529 IP6X  <b>Drop Test:</b>            Repeated drops from the height of 1 m on asphaltic concrete surface. All sides – top, bottom and border.</p> <p><b>RoHS Compliant:</b> Yes</p>

**It's time.**

<Contact to>

**Topcon Singapore Positioning Sales Pte Ltd**

60 Alexandra Terrace, #08-27 The Comtech, Singapore 118502 Phone: (+65)6778-3456 Fax: (+65)6773-6550 Email: svy.regional@topcon.com.sg Web: www.topcon.com.sg

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