

**NET-G3**



# REFERENCE STATION RECEIVER



**Most technologically advanced  
reference station receiver**



- PARADIGM-G3<sup>®</sup> CHIP – TRIPLE CONSTELLATION TECHNOLOGY
- SUPER LOW POWER CONSUMPTION
- 72 UNIVERSAL CHANNEL SATELLITE TRACKING
- SUPERIOR SIGNAL TRACKING AND PERFORMANCE
- 100 PERCENT COMPATIBLE WITH ALL SIGNALS FOR BOTH EXISTING AND FUTURE PLANNED SATELLITE NAVIGATION SYSTEMS

# It's time.

The new NET-G3 receiver from Topcon is the most technologically advanced reference station receiver in the World today. At the core of this receiver is Topcon's new Paradigm G3® chip. Over 75% smaller than existing GPS chip technology, the new Paradigm G3® boasts some huge gains in both capability and performance.



The NET-G3, incorporating Topcon's new G3 chip technology, is the World's First reference receiver to provide Universal Signal Tracking – all signals from all three global satellite positioning constellations (GPS-Glonass-Galileo). Using a unique patented technology, the NET-G3 incorporates 72 Universal Tracking Channels, capable of tracking all signals from all satellite systems that are currently in use and planned for the future.



Through simple firmware changes, the selection of which signals and codes tracked can be changed very easily. Should new signals or frequencies be added or changed in the future, they can be accommodated through receiver firmware only, without expensive and inconvenient hardware changes.

The benefit for the consumer of reference network hardware is the new NET-G3 receiver put in place today, will provide the most complete signal tracking technology available now and well into the future, eliminating the hassles of upgrading hardware as satellite signals change. With the incorporation of GPS, GPS L2C and L5, as well as Glonass and Galileo signals; Topcon offers the ultimate network receiver solution, providing the very best reference station solution for your network users.

Along with the new G3 technology, the NET-G3 boasts complete system connectivity. USB, Ethernet, and four serial ports combined with an industry leading 20Hz data rate, the NET-G3 offers high speed connections both in and out of the reference station.



When used with its companion the CR-G3 choke ring antenna the NET-G3 receiver is the reference station of today and for tomorrow. Offer network users a complete signal solution – the new NET-G3 with Topcon's revolutionary G3 satellite tracking technology. All positioning constellations – all signals – all the time. Only from Topcon, the World leader in advanced positioning technologies.



## TOPCON CORPORATION

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## Specifications

### Tracking:

Number of Channels	72 Universal Channels
Signals Tracked:	
GPS	L1, L2, & L5 carrier, CA, L1 P, L2 P, L2C
GLONASS	L1, L2, & L5 carrier, L1CA, L2CA, L1 P, L2 P
GALILEO	E2-L1-E1, E5
WAAS/EGNOS	Yes
Antenna Type	CR-G3 Choke ring, G3-A1 Geodetic

### Accuracy:

Real time RTK accuracy	H: 10mm+1ppm V: 15mm+1ppm
Post processed Static	H: 3mm+0.5ppm V: 5mm+0.5ppm

### Data & Memory:

Internal Memory	None
Additional Memory	Removable CF Memory Card up to 8GB
Data Update/Output Rate	1 – 20Hz Selectable
Real Time Data Output	TPS, RTCM SC104, CMR, CMR+
ASCII Output	NMEA 0183 version 3.0
Other I/O Signals	1pps, Event Marker, external frequency input
Control & Display Unit	GUI external software interface

### Communications:

TCP/IP Address	Up to 5 different address ports standard
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### Physical Characteristics:

Ports	4 Serial 1 USB 2 Power 1 Ethernet
Memory	1 Removable CF card
Status Indicators	6x3 color LED's
User Interface	2 Key
Dimensions (W x H x L)	167mm x 92mm x 275mm 6.57" x 3.62" x 10.83"
Weight	2 Kg (4.41 Lbs)

### Power:

External Power Input	6 to 28 Volts DC
Typical Power Consumption	Less than 4.0 Watts
Power Ports	2, 1 primary, 1 secondary

### Environmental:

Enclosure	Aluminum
Operating Temperature	-40°C to 65°C
Storage Temperature	-40°C to 75°C
Environmental Specification	IP67 waterproof/dustproof