

## Advanced millimeter-wave wireless bridge

For more than a decade, Comotech has heavily invested in millimeter-wave R&D technologies. As a result of the investment and more than 20 years of experience in the millimeter-wave R&D technology sector, our product portfolio includes advanced high speed premium class wireless bridges with speeds up to 20 Gbps.

For financial network including high frequency trading (HFT) as well as in lots of medical operational networks, low latency data transmission is a very important requirement. Comotech produces world-class leading ultra-low latency (ULL) radio sub systems and full featured outdoor rated radio solutions with latency of less than 10 ns per radio. These ULL products are leading edge and world record holding systems in terms of network latency that are used by world leading trade organizations like the Chicago Board of Trade (CBOT) and stock exchanges around the world, like New York and London Stock Exchange.

## **Features**

- E-band 70/80GHz point-to-point Wireless Bridge
- 10Gbps (10GE) full-duplex(1+0), 20Gbps Extension (2+0, Dual\_10Gbps)
- 256QAM-to-QPSK Hitless ACM (Adaptive Coding and Modulation)
- IEEE1558v2, SyncE

- Low Latency <48 us
- Reliability up to 99.999%
- Easy ant/ODU assembly at field
- Easy polarization deployment
- Easy azimuth/elevation alignment
- IP66 ODU enclosure
- All weather conditions

## **Application**

- 5G Backhaul, Fronthaul, midhaul Fixed Wireless Access
- P2P extra power up to +33dBm (2W optional)
- High speed financial network
- 5G/6G backhaul
- Hospital/campus application
- Last mile access extend high speed service
- Surveillance/security





## **Specifications of NTE10GQ**

| Parameters            |                | Specifications  |
|-----------------------|----------------|---|
| Frequency Band        |                | 71 ~ 76GHz, 81 ~ 86GHz  |
| RF Bandwidth          |                | 2000MHz   |
| Modulation Scheme     |                | QPSK, 16QAM, 32QAM, 64QAM, 128QAM, 256QAM<br>Hitless ACM (Adaptive Coding and Modulation) |
| Interfaces            |                | 10G SFP+, 1G SFP, RJ-45   |
| Capacity              |                | Up to 10Gbps  |
| Configuration         |                | 1+0, 2+0  |
| TX Power Output       |                | +21dBm  |
| Networking            |                | IEEE1588v2 Precision Time Protocol (PTP)<br>Synchronous Ethernet (SyncE)                  |
| Latency               |                | < 48us  |
| Management Access     |                | In-band, Web based GUI, SNMP V2, Telnet   |
| Antenna               |                | 1ft (30cm, 45dBi, 0.9°), 2ft (60cm, 51dBi, 0.5°)  |
| Power Supply          |                | DC 48V  |
| Power Consumption     |                | 83W   |
| Size                  | Radio only     | 300 x 230 x 130mm   |
|                       | With Antenna   | 620 x 620 x 490mm@2ft, 340 x 340 x 220mm@1ft  |
| Weight                | Radio only     | 3.3kg (7.2lbs)  |
|                       | With Antenna   | 6.7kg (14.7lbs)@2ft, 3.6kg (7.9lbs)@1ft   |
|                       | Pole Mount Kit | 3.2kg (7lbs)  |
| Operating Temperature |                | Temperature: -40 ~ +65°C  |
| Weather               |                | IP66 / All weather  |
| Vibration             |                | Standard: IEC 60721-3-4, Duration: 30min/axis, random 4M3                                 |
| Wind load             |                | Survival: 235km/h (65m/s)<br>Operation: 180km/h (50m/s)                                   |











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