



**InfiLINK XG** is InfiNet's most recent addition to our wireless portfolio. It is a record-breaking and innovative Point-to-Point solution in the sub-7 GHz frequency band, boasting the best-in-breed spectral efficiency, higher-than-ever-before processing power and distance vs. performance ratio. Reaching a peak of 500 Mbps of net throughput in 40 MHz of spectrum, and more than 130 Mbps in only 10 MHz, it is the fastest Point-to-Point system available in the marketplace today.

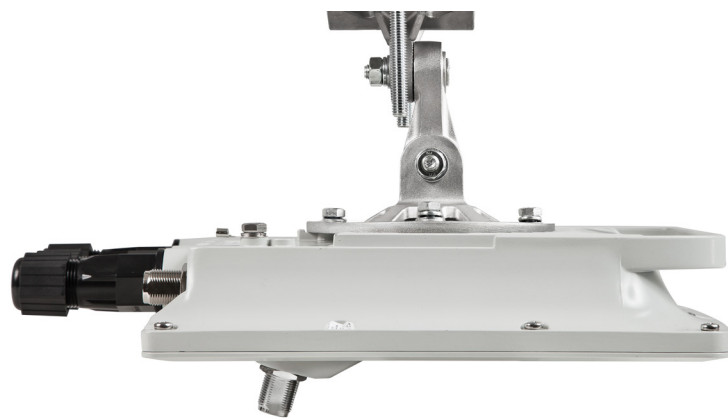
Available with a wide range of integrated antennas, as well as a connectorized version for use with 3rd party external antennas, and coupled with improved transmit power and sensitivity, the XG family will fit perfectly into a large array of applications such as backhaul in the telecom market, education, oil and gas, smart cities, video surveillance and public safety. It was designed by InfiNet to meet the exact requirements of the most demanding customers, most complex projects and most challenging environments.

## APPLICATIONS

- ▶ HIGH CAPACITY SHORT-, MEDIUM- AND LONGHAULS FOR 3G/4G OPERATORS AND SERVICE PROVIDERS
- ▶ FULL-FLEDGED FIBRE/FSO/MILLIMETRE-WAVE REPLACEMENT, EXTENSION OR BACKUP
- ▶ LOS AND NLOS MACRO- AND SMALL-CELL BACKHAUL
- ▶ VIDEO SURVEILLANCE OVER MEDIUM AND LONG DISTANCES
- ▶ DISASTER RECOVERY
- ▶ BUILDING-TO-BUILDING CONNECTIVITY
- ▶ RURAL/SUBURBAN LAST MILE ACCESS

# InfiLINK XG

## Top Facts Sheet



### HIGHEST SPECTRAL EFFICIENCY

Best-in-breed up to 14 bps/Hz  
Real throughput up to 130 Mbps in just 10 MHz of spectrum  
Innovative radio technology for NLOS and reflected signal conditions

### SUPERIOR PERFORMANCE AND PROCESSING POWER

Unmatched 1 million packets-per-second processing power  
Full capacity at any packets sizes and for any type of traffic

### UNMATCHED CAPACITY

Net performance of 250 Mbps in 20 MHz and 500 Mbps in 40 MHz

### LONG RANGE LINKS

Connectivity at the distances of up to 100 km  
Guaranteed availability with the range of over 60 km using integrated antenna units

### IMPROVED NOISE IMMUNITY / INTERFERENCE AVOIDANCE

Instant DFS technology allows automatic frequency channel change with zero downtime  
Background spectrum scan  
On-site synchronization for best spectrum utilization  
High-selectivity receiver with channel filtering cuts off in-band interference (2 and 3 GHz models only)

### FLEXIBILITY

Available in connectorized configuration and with integrated from 22 to 28 dBi flat-panel dual-polarity antennas  
Easy-to-align and easy-to-install  
Fully configurable uplink/downlink ratio  
Very small footprint

### SEAMLESS INTEGRATION

Extended QoS support  
Two Gigabit Ethernet ports  
SFP optical port  
IEEE 1588  
Full-fledged L2 switching

### RELIABILITY & ROBUSTNESS

Ruggedized aluminium cast IP66 and IP67 enclosure  
Extended temperature range of -40°C to +60°C, with 100% humidity  
No link degradation even in harsh weather conditions  
Built-in surge protection

### ULTRA-LOW LATENCY

Ultra-low consistent 0.5 ms latency at any distance  
Configurable frame size



# InfiLINK XG Technical Specifications

## PERFORMANCE

|                    |   |
|--------------------|---|
| Throughput         | Up to 500 Mbps, net aggregate                             |
| Packet performance | More than 1 million packets per second (line rate)        |
| Latency            | 0.5-3 ms one-way, typical (depending on air frame period) |

## RADIO TECHNOLOGY

|                      |   |
|----------------------|---|
| Modulation           | Cyclic single carrier   |
| Cyclic prefix        | 1/8 and 1/16 (for 20 and 40 MHz channel width)  |
| Modulation schemes   | Eleven modulation/coding schemes from QPSK to QAM256, as well as QAM1024  |
| Frequency range      | 2.0-3.0 GHz<br>3.0-4.0 GHz<br>4.0-5.0 GHz<br>4.9-6.0 GHz<br>6.0-6.425 GHz   |
| Channel widths       | 10, 20 and 40 MHz   |
| Spectral efficiency  | Up to 14 bps/Hz   |
| Transmit power       | Up to 27 dBm (average, per Tx chain, model-dependent) @ QPSK to QAM64<br>Up to 26 dBm @ QAM256, Up to 18 dBm @ QAM1024 (model-dependent)  |
| Receiver sensitivity | down to -95 dBm @ 10 MHz, QPSK (model-dependent)  |
| System gain          | Up to 178 dB (based on a 28 dBi integrated antenna in 10 MHz channel width)   |
| Duplex Scheme        | Hybrid-FDD (except 6 GHz models), TDD   |
| Antenna              | - Integrated: dual-polarization flat panel 19, 22, 23, 24, 26, 27, 28 dBi (selectable at time of ordering and model-dependent)<br>- Connectorized: 2x N-type (Female) connectors for external dual-polarization antenna |
| Maximal range        | Up to 100 km (clear line-of-sight)  |

## AIR PROTOCOL

|                                    |   |
|------------------------------------|---|
| Air frame                          | Configurable, from 2 to 10 ms   |
| Uplink/downlink ratio              | Configurable, from 50:50 to 90:10 in any direction  |
| Automatic modulation control       | Fully supported   |
| Automatic ranging                  | Fully supported   |
| TDD synchronization                | Fully supported, via built-in GNSS receiver or IEEE1588 PTP   |
| Instant DFS<br>(5 GHz models only) | Dynamic interference mitigation and avoidance mode:<br>- Background spectrum scan<br>- Seamless automatic uplink/downlink channel change to the least congested frequency available |

## WIRED INTERFACES

|              |   |
|--------------|---|
| Ethernet     | 2x 10/100/1000-BaseT copper ports, RJ-45:<br>GE0 – Data+PoE input<br>GE1 – Data only<br>SFP port: various 3rd party single and multi-mode fibre module sare supported<br>Either of the ports can be configured independently for management, user data or for a hybrid mode |
| PoE          | Proprietary PoE   |
| Cable length | Copper Ethernet cable length: up to 100 m between outdoor unit and the primary network connection<br>Fibre cable length: up to 300 m or more depending on the SFP module type   |

## QOS AND NETWORK PROTOCOLS

|                       |   |
|-----------------------|---|
| QoS                   | 4 queues                                  |
| Prioritization        | «Strict» and «Weighted Round Robin» modes |
| Packet classification | 802.1p                                    |
| Network protocols     | VLAN, STP                                 |
| Timing Transport      | IEEE 1588 v2, transparent clock           |

# InfiLINK XG Technical Specifications

## MANAGEMENT AND INSTALLATION

|                      |  |
|----------------------|--|
| LED Indication       | Power status, wireless and wired link status, RSSI indication, TDD sync status |
| Management Protocols | HTTP, telnet, SNMP v1/2c/3 (MIB-II and proprietary MIBs)                       |
| Web GUI Tools        | Antenna alignment tool, Spectrum Analyzer                                      |

## PHYSICAL

|                             |  |
|-----------------------------|--|
| Weight and dimensions       | Please refer to the model matrix below                                     |
| Operating temperature range | from -40°C to +60°C  |
| Dust and water protection   | IP66, IP67   |
| Wind load                   | 160 kph, operational; 200 kph, survival                                    |
| Power supply                | IDU-BS-G(60W): 90-220 VAC, 50/60 Hz, -10°C to +40°C, 151x62x38 mm, 0.32 kg |
| Input DC range              | ±43 to ±56 VDC   |
| Consumption                 | Up to 30 W   |

## ACCESSORIES




|                               |  |
|-------------------------------|--|
| Spare mounting brackets       | MONT-KIT-85 or MONT-KIT-85s  |
| DC injector                   | AUX-ODU-INJ-G (indoor/outdoor installation), IDU-LA-G (V.01) (indoor installation) |
| External lightning protection | AUX-ODU-LPU-G  |
| GPS/GLONASS antenna           | ANT-SYNC   |

## COMPLIANCE


|        |   |
|--------|---|
| Safety | EN 60950-1:2006, UL 60950-1 2nd ed.   |
| Radio  | <b>2, 3, 4, 6 GHz:</b> EN 302 326-2 (pending)<br><b>5 GHz:</b> EN 301 893 v.1.8.1, EN 302 502, v.1.2.1, FCC part 15.247 |
| EMC    | ETSI EN 301 489-1, ETSI EN 301 489-17, FCC Part 15 Class B  |
| RoHS   | Directive 2011/65/EU  |

## MODEL RANGE

### Integrated Antenna Models

| PART NUMBER          | FREQUENCY BAND | INTEGRATED ANTENNA            | WEIGHT AND SIZE         |   |
|----------------------|----------------|-------------------------------|-------------------------|---|
| Xm/5X.500.2x500.2x23 | 4900-6000 MHz  | Flat-panel, 23 dBi, 10x10 deg | 305x305x67 mm<br>2.4 kg |  |
| Xm/6X.500.2x500.2x24 | 6000-6425 MHz  | Flat-panel, 24 dBi, 9x9 deg   |                         |   |
| Xm/2X.500.2x500.2x19 | 2300-2900 MHz  | Flat-panel, 19 dBi, 17x17 deg | 371x371x89 mm<br>3.3 kg |  |
| Xm/3X.500.2x500.2x22 | 3100-4010 MHz  | Flat-panel, 22 dBi, 12x12 deg |                         |   |
| Xm/4X.500.2x200.2x23 | 4300-5010 MHz  | Flat-panel, 23 dBi, 9x9 deg   |                         |   |
| Xm/5X.500.2x500.2x26 | 4900-6000 MHz  | Flat-panel, 26 dBi, 8x8 deg   | 600x600x74 mm<br>6.3 kg |  |
| Xm/5X.500.2x500.2x28 | 4900-6000 MHz  | Flat-panel, 28 dBi, 5x5 deg   |                         |   |
| Xm/6X.500.2x500.2x27 | 6000-6425 MHz  | Flat-panel, 27 dBi, 5x5 deg   |                         |   |

### External Antenna Models

| PART NUMBER     | FREQUENCY BAND | ANTENNA CONNECTION | WEIGHT AND SIZE         |   |
|-----------------|----------------|--------------------|-------------------------|---|
| Um/2X.500.2x500 | 1990-3010 MHz  | 2xN-type (Female)  | 256x240x86 mm<br>2.1 kg |  |
| Um/3X.500.2x200 | 2990-4010 MHz  |                    |                         |   |
| Um/4X.500.2x200 | 3990-5010 MHz  |                    |                         |   |
| Um/5X.500.2x500 | 4900-6000 MHz  |                    |                         |   |
| Um/6X.500.2x500 | 6000-6425 MHz  |                    |                         |   |

