InfiNet wireless

Quanta 5

NEW

Quanta 5 is a brand new record-breaking spectral efficiency 5 GHz Point-to-Point solution with an impressive performance of up to 460 Mbps in only a 40 MHz channel size.

Quanta 5 offers a unique combination of high performance, affordability and ease of installation.

460 Mbps   **900,000 pps**   **5 GHz**   **Point-to-Point**

Octopus SDR Platform

InfiNet's latest SDR platform has been designed based on a Software-Defined Radio technology aimed at increasing link performance several-fold. Addressing challenges such as limited spectrum availability, growing interference challenges and demands for yet more capacity, Quanta 5 combines the best features from the well-proven InfiNet R5000 and XG families as well as numerous cutting-edge wireless breakthroughs.
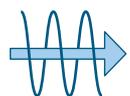
Quanta 5 is fully future proof thanks to a new design which allows the implementation of new PHY, MAC and upper layer features remotely via a firmware upgrade, even for units already deployed in the field.

Optimal balance of cost and quality

High capacity and reliability

Superior interference mitigation

Top Facts

✔ **Exceptional Cost Efficiency**

The Quanta 5 solution offers significant cost savings when compared to other cabled and wireless solutions available in today's marketplace. It is the first product from InfiNet Wireless designed primarily for the SOHO market and small service providers.

✔ **Optimal Performance in all Operational Conditions**

Quanta 5 supports 14 modulation-coding schemes, which makes it easily distinguishable from other solutions. Even when operating in high interference environments, Quanta 5 dynamically selects the most suitable MCS for each polarization, and ensures the delivery of all packets transmitted using an advanced ARQ algorithm.

✔ **Interference Mitigation**

Quanta 5 has a number of built-in interference mitigation techniques. The Instant DFS technology allows automatic frequency channel change in case of congestion or radar detection, all achieved with zero outage. Thanks to its support of H-FDD (also known as split-frequency mode), it identifies and selects uplink and downlink channels independently.
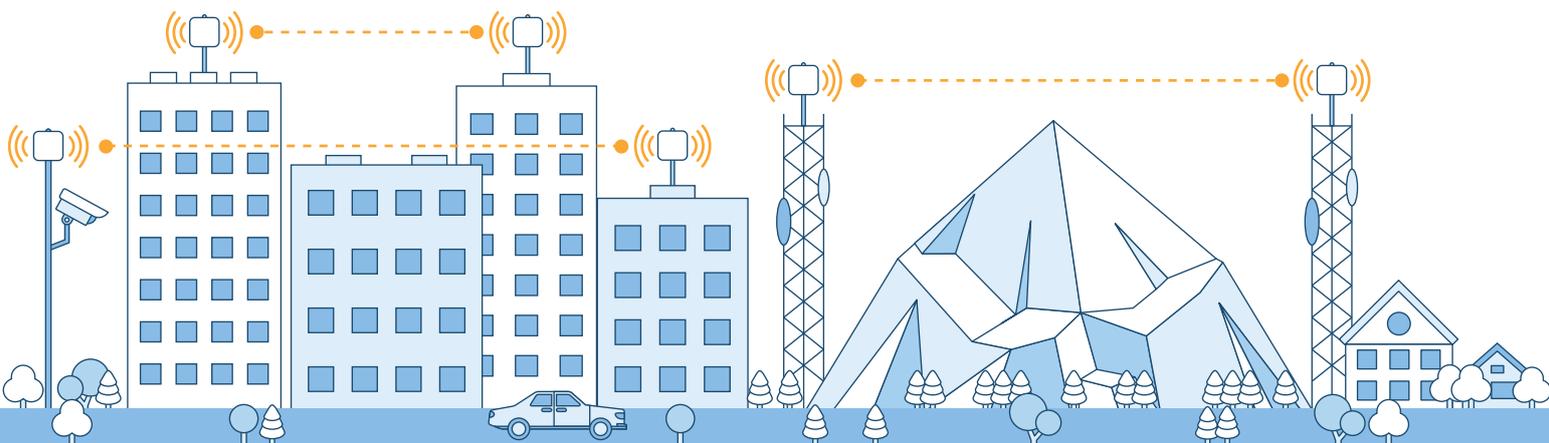
✔ **Ease of Installation**

Quick and ease of installation reduces field deployment costs and facilitate rapid service delivery.

✔ **Robustness**

Guaranteed and stable connectivity even in the most adverse weather conditions, including extreme temperature ranges from -40° to +60°C, thunderstorms and wind speeds of up to 160 km/h.

Application

Quanta 5 can be deployed in a diverse range of applications, from backhauling for Wi-Fi and 4G/LTE base stations to CCTV and video-surveillance infrastructures. It can also provide Internet access to remote locations.
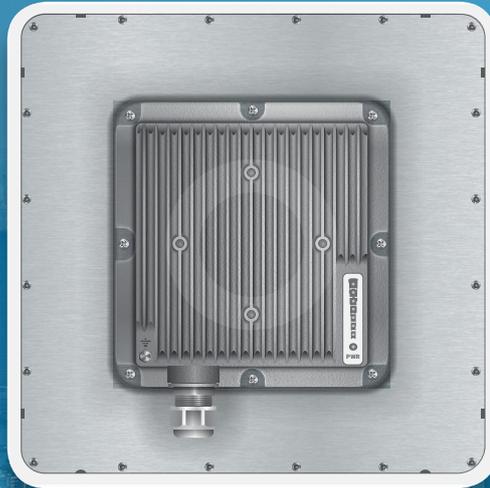
Technical Specifications

Performance	
Throughput	Up to 460 Mbps, net aggregate
Packet performance	900,000 packets per second
Latency	0.5 to 3ms maximum, each way
Radio Technology	
Modulation	SC-FDE
Modulation coding schemes	14 MCS – from QPSK to QAM256
Frequency range	4900 – 6000 MHz
Channel width	3.5, 5, 7, 10, 14, 15, 20, 28, 30, 40 MHz
Center frequency adjustment step	1 MHz
Transmit power	Up to 27 dBm
Receiver sensitivity	Down to -95 dBm
Duplex scheme	TDD, H-FDD
Antenna	Integrated dual polarization flat panel 23 dBi Connectorized: 2x N-type connectors for external dual-polarization antenna
Maximal range	Up to 40 km
Air Protocol	
Air frame	Configurable from 1 to 10 ms
Uplink/Downlink ratio	Configurable from 50:50 to 90:10, in any direction
Automatic modulation control	Supported
Automatic ranging	Supported
Instant DFS	Supported
Wired Interfaces	
Ethernet	1x GigabitEthernet port (RJ45)
PoE	802.3at or InfiNet Wireless proprietary passive PoE
Qos And Network Protocols	
QoS	8 queues
Prioritization	Supported
Packet classification	802.1p
Network protocols	VLAN, 802.1ad (DVLAN Q-in-Q)*, 802.1Q*
Network timing	IEEE 1588v2 transparent clock
Management And Installation	
LED indication	Power status, link status and RSSI indication
Management protocols	HTTP, HTTPS, SSH, SNMP, FTP
Web GUI tools	Antenna alignment tool, Spectrum analyzer
Physical	
Operating temperature range	From -40ºC to +60ºC
Dust and water protection	IP66, IP67
Wind load	160 km/h, operational; 200 km/h, survival
Power supply	IDU-CPE-G, IDU-BS-G (60W), IDU-LA-G(V.01)
Power consumption	Up to 15 W
Compliance	
Safety	EN 60950-1**, UL 60950-1 2nd ed.**
Radio	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	Directives 1999/5/CE**, 2002/95/EC**, 2011/65/EU**

Model Configuration

Q5-23

Q5-E

FREQUENCY RANGE	4900 – 6000 MHz	4900 – 6000 MHz
ANTENNA	23 dBi 10x10 deg	2 x N-type connectors
SIZE AND WEIGHT	305 x 305 x 66 mm, 1.75 kg	180 x 190 x 86 mm, 1.2 kg

InfiNet
w i r e l e s s

InfiNet Wireless provides its customers with carrier-grade wireless solutions through a global network of highly qualified channel partners

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