

Quanta 6 **NEW**

Quanta 6 is a brand-new record-breaking spectral efficiency Point-to-Point solution which operates in the 6 GHz range. It guarantees impressive performance of up to 650 Mbps in a 56 MHz channel size.

Quanta 6 offers a unique combination of high performance, reliability and ease of installation.



Up to 650 Mbps



6 GHz



Up to 1,200,000 pps

Octopus SDR Platform

Infinet's latest Octopus Software Defined Radio (SDR) platform has been designed using a state-of-the-art proprietary SDR technology specifically aimed at increasing link performance several-fold. Addressing challenges such as limited spectrum availability, growing interference and demands for yet more capacity, Quanta 6 combines the best features from Infinet's well-proven R5000 and XG families, as well as numerous cutting-edge wireless breakthroughs, to deliver unparalleled performance in all weather conditions.

Quanta 6 is based on the brand new Octopus SDR platform, making this family of PTP solutions fully future proof thanks to efficient frequency spectrum usage, higher capacity and PHY, MAC and upper layer functionality support.



**Superior performance
and processing power**



**High reliability
and robustness**



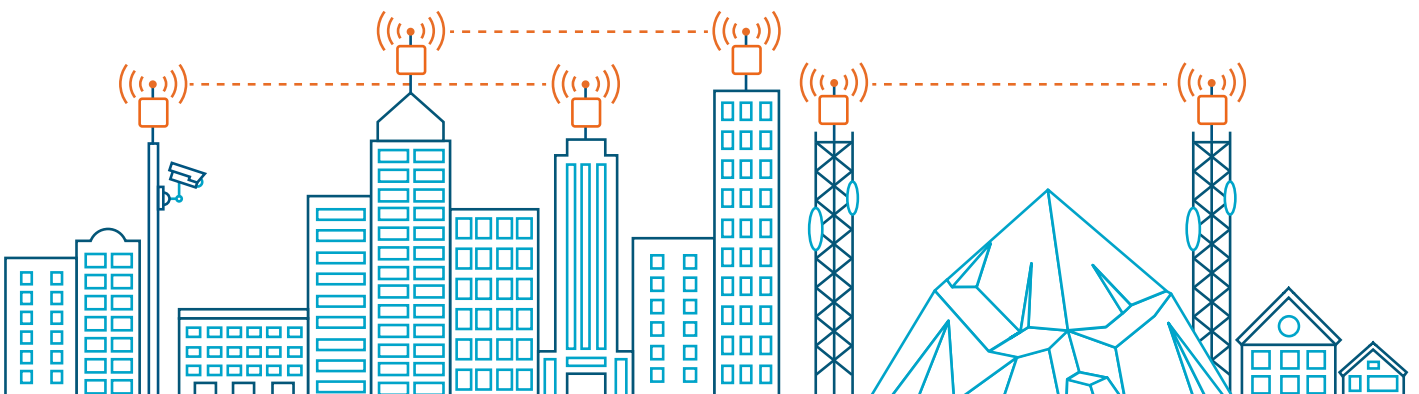
**Highest spectral
efficiency**

Top Facts

- ✔ **Superior performance and processing power**
The combination of high transmit power even at higher modulations, and excellent receiver sensitivity allows to achieve high performance and radio link availability at long ranges.
- ✔ **Highest spectral efficiency**
Consume 30% less spectrum for the same capacity. The Quanta 6 performance reaches 650 Mbps that meets the needs of most last mile links, trunk channels of the light and medium networks.
- ✔ **Reliability & robustness**
Guaranteed and stable connectivity even in the most adverse weather conditions, including extreme temperature ranges from -55 °C to +60 °C, thunderstorms and wind speeds of up to 160 km/h thanks to ruggedized aluminium cast IP66 and IP67 enclosure and built-in surge protection.
- ✔ **Wired integration support**
Quanta 6 could be integrated into existing optical networks thanks to second SFP port.
- ✔ **Ease of Installation**
Quick and easy installation reduces field deployment costs and facilitates rapid service delivery.

Application

Quanta 6 can be deployed in a diverse range of applications, from backhauling for Wi-Fi and small cell to CCTV and video-surveillance infrastructures. It can also provide Internet access to remote locations.

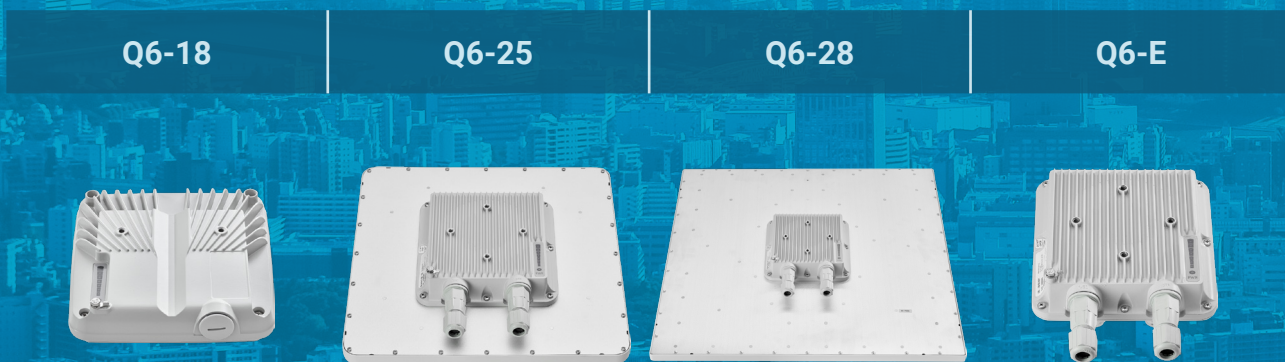


Technical Specifications

Performance	
Throughput	Up to 650 Mbps, net aggregate
Packet performance	Up to 1,200,000 packets per second
Latency	Up to 1.7 ms for the air frame 1 ms, depends on air frame value
Radio Technology	
Modulation	SC-FDE
Modulation coding schemes	14 MCS – from QPSK to QAM256
Frequency range	6000–6425 MHz
Channel width	3.5, 5, 7, 10, 14, 15, 20, 28, 30, 40, 50, 56 MHz
Center frequency adjustment step	1 MHz
Transmit power	Up to 27 dBm
Receiver sensitivity	Down to -101 dBm
Duplex scheme	TDD
MIMO 2x2	Supported
Antenna	Integrated dual polarization flat panel 18, 25 and 28 dBi Connectorized: 2x N-type connectors for external dual-polarization antenna
Maximal range	Up to 80 km for 28 dBi antenna More than 200 km for high gain external antenna
Air Protocol	
Air frame	Configurable from 1 to 10 ms
Uplink/Downlink ratio	Configurable from 50:50 to 92:8, in any direction
Automatic modulation control	Supported
Automatic ranging	Supported
Wired Interfaces	
Ethernet	Combo: 1x Gigabit Ethernet port (RJ45), 1x SFP Q6-18: 1x Gigabit Ethernet 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
Jumbo frame support	Up to 9038 bytes
Management And Installation	
LED indication	Power status, link status and RSSI indication
Management protocols	HTTP, HTTPS, SSH, SNMP, Telnet
Web GUI tools	Antenna alignment tool, Spectrum analyzer
Physical	
Operating temperature range	From -40 °C to +60 °C, can be extended to -55°C ... +60°C
Dust and water protection	IP66, IP67
Wind load	160 km/h, operational; 200 km/h, survival
Power supply	IDU-CPE-G(24W), IDU-CPE-G (56W), IDU-LA-G(V.01), AUX-ODU-INJ-G
Power consumption	Up to 15 W
Compliance	
Safety	EN/IEC 62368-1:2018*, EN/IEC 62311:2019*
Radio	ETSI EN 302 217-1/-2*
EMC	ETSI EN 301 489-1/-4*, FCC Part 15.407*
RoHS3	EN IEC 63000:2018*
Lightning protection	IEC 61000-4-2: +/-4kV (contact discharge), +/-8kV (air discharge); IEC 61000-4-4: +/-0.5kV; IEC 61000-4-5: +/-1kV (line-to-ground), +/-0.5kV (line-to-line)

* Pending

Model Configuration



	Q6-18	Q6-25	Q6-28	Q6-E
FREQUENCY RANGE	6000–6425 MHz	6000–6425 MHz	6000–6425 MHz	6000–6425 MHz
ANTENNA	18 dBi 18x18 deg	25 dBi 8x8 deg	28 dBi 5x5 deg	2 x N-type connectors
SIZE AND WEIGHT	188 x 188 x 45 mm 1.3 kg	350 x 350 x 71.5 mm 2.3 kg	600 x 600 x 68 mm 5.8 kg	180 x 190 x 86 mm 1.2 kg

Scan it for more information



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