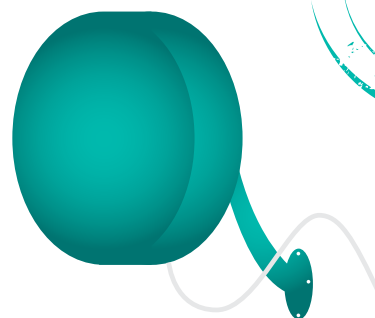


# Wireless Pro Ethernet

- **Carrier Class Wireless Ethernet**
- **Protocol-transparent Wireless Ethernet technology**
- **Highest traffic quality available on the market**
- **Availability 99,7% or 99,99% & high security**
- **Based on licensed microwave bands**



Wireless Pro is a professional radio-based point-to-point network connection.

## **Carrier Ethernet over the air**

Wireless Pro is a part of GlobalConnect's Carrier Ethernet-family of services, and the technical performance of Wireless Pro is close to that of our fibre-based solutions:

- Data rates from 25 Mbit/s to 1 Gbit/s
- Transparent to most kinds of Ethernet frames and you can use VLANs at several levels as well as proprietary protocols
- Close to the theoretical upper limit of traffic quality, and can be used for the most demanding and sensitive types of traffic, e.g. telephony, videostreaming, and more.

## **Security**

Wireless Pro exclusively uses licensed frequency bands from 15 GHz to 80 GHz. This means the complete absence of interfering radio signals, and any non-authorized access is difficult due to restricted availability of radio equipment for licensed radio bands. As the radio beam pattern between the two antennas is slim and focused, it is even harder to access. As an additional security option, GlobalConnect offers signal encryption.

## **Automatic signal adaptation to compensate for weather conditions**

Wireless Pro is based on the newest technology,

which adapts to weather conditions. This is achieved as the equipment automatically adjusts its chosen modulation form and transmitter power according to the immediate requirements. Speed varies accordingly.

## **Many installation options**

Wireless Pro is installed using a radio unit mounted at a suitable location on a building at your address. The radio unit is designed to withstand harsh weather conditions and can easily be mounted on antenna masts, gables, roofs, light poles, traffic light masts, etc. The parabolic antenna is 30 or 60 cm wide, depending on the required radio link distance.

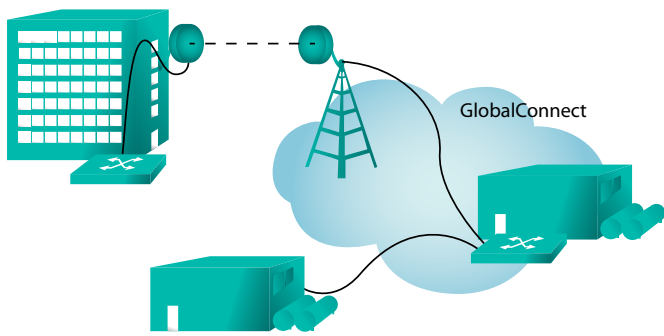
The radio unit is constructed using environmentally friendly technology, having a low power consumption of approximately 50 W. It contains all necessary electronics and does not require space in your IT room.

## **Redundant access and short term lease**

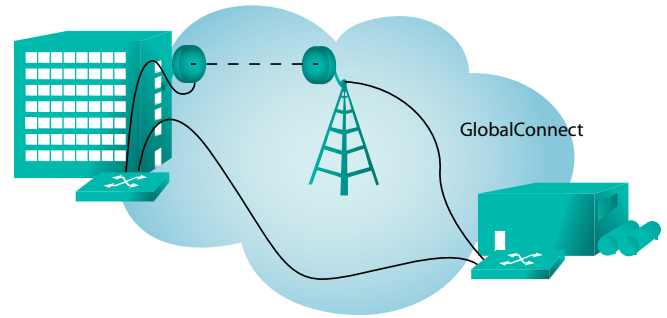
Wireless Pro is an advantageous alternative to fibre if your address happens to be far from GlobalConnect's existing fibre network. Wireless Pro may also be used for redundant access, where your addresses are connected using both a fibre in the ground and a Wireless Pro radio link.

Wireless Pro is also suitable for short term lease of high bandwidth connections, e.g. for exhibitions, construction sites, festivals, etc.

# Technical Data



**Figure 1:** Wireless Pro access link as part of a network solution.



**Figure 2:** Wireless Pro pairs with fibre for redundant access.

ETSI Radio frequency bands	15 – 18 – 23 – 38 - 80GHz
Link distance	200m - 25 km
Antenna sizes	30, 60, 120 cm
Modulation	Adaptive QAM256 - QPSK
Interface	10/100/1000Base-T (RJ-45) or 1000base-X (SFP)
Speeds	25 - 300Mbit/s i 25/50Mbit step, 500Mbit/s, 1Gbit/s
Latency	<700 µs, 120µS@256QAM
Jitter	< 1 ms
Packet loss	< 0,01 %
Maximum MAC-addresses	unlimited
Redundancy option	yes
Failover switching time	200 ms
Availability (with/without redundancy)	99.99% / 99.7%
Maximum packet size (MTU)	9600 Bytes
802.1Q VLAN transparency	Yes
Stacked VLAN transparency	yes
BPDU transparency	Yes
802.1p transparency	Yes
Multicast supported	Yes