

# ALFOplus80 series

Product Leaflet



siae microelettronica

## From 2 to 10 Gbps E-Band Full Outdoor

Whether in mobile, fixed or private networks, the E-band millimetre wave solution represents a fundamental technology tool bridging the gap between fibre high capacity systems and flexible cost effective wireless transmission. Today, our 3<sup>rd</sup> generation E-band solution, the ALFOplus80HDX, achieves 10Gbps full-duplex, ultra-high capacity and represents an even better solution acting as a prime transmission media as with fibre.

ALFOplus80HDX provides the same capacity of fibre, highest deployment flexibility and homogeneous operational behaviour as traditional microwave, allow operators to fully liaise on existing knowledge and skills, minimizing introduction costs, while modernizing the transport network.



Siena, Italy

# MILLIMETER WAVE RADIO

## ALFOplus80HDX

ALFOplus80 series is a Full-Outdoor, full IP Next Generation Millimetre wave radio operating in the E-Band (71-76 GHz / 81-86 GHz).

The 3<sup>rd</sup> generation system **ALFOplus80HDX** is the ideal solution for ultra high capacity wireless links in urban environment for all carrier-class applications: mobile backhaul, fronthaul, enterprise, ISP.

## MAIN FEATURES

- Up to 10 Gbps Throughput
- Channel bandwidth up to 2000 MHz
- BPSK/4/16/64/128/256 QAM modulation schemes
- Hitless Adaptive Coding Modulation and Bandwidth
- Integrated flat antenna
- AES-256 Encryption
- Power Over Ethernet
- 10 Gigabit and Gigabit interfaces
- L1 link aggregation (2+0 XPIC and Multi Band Link)
- Carrier Ethernet protocol stack
- Native SDN ready (NETCONF agent)
- SM-OS based platform
- Synchronous Ethernet and IEEE 1588v2
- Time Sync (ITU-T G.8275.1, G8273.2)
- Microwave Adaptive bandwidth notification

## LAYER 2 MAIN FUNCTIONALITIES

- MEF 2.0 Carrier Ethernet Services
- Complete VLAN management
- Per VLAN flexible ingress Policer (CIR & EIR definition)
- Color-Aware Classification
- Programmable queues length
- Jumbo Frames up to 12 kbytes
- Flexible QoS definition based on VLAN, IPv4, IPv6, MPLS
- H-QoS enhanced service management
- RMON Statistics

## TYPICAL APPLICATIONS

- Any-G Mobile Backhaul for Access and aggregation
- CRAN, front-haul up to 10 Gbps
- Last Mile fiber extension for business customers
- Emergency wireless links
- Complementary solution to fibre deployment

Radio Access migration towards full packet technology is boosting demand for All Outdoor microwave equipments. AGS20 enables this move by providing:

- Connectivity towards ALFOplus and ALFOplus80 series
- 2.5/10 Gbps optical interface
- Load balancing and link protection
- Power over Ethernet and integrated lighting protection to direct feed All Outdoor equipments
- TDM connectivity

