

# ALFOplus80 series

Product Leaflet



siae microelettronica

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

Whether in mobile, fix or private networks, the E-band millimetre wave represented a fundamental technology tool bridging the gap between fibre high capacity systems and flexible cost effective wireless transmission, nowadays the 3<sup>rd</sup> generation of E-band solutions -the ALFOplus80HDX- achieving 10Gbps ultra-high capacity, represents an even better solution acting as a prime actor with the fibre.

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 the introduction costs, while modernizing the transport network.



Siena, Italy

# MILLIMETER WAVE RADIO

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 named **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 from 250 to 1000 MHz/2000 MHz
- BPSK/4/16/64/128/256 QAM modulation schemes
- Hitless Adaptive Coding and Modulation
- Full Carrier Ethernet protocol stack
- AES Encryption
- Power Over Ethernet
- 10 Gigabit and Gigabit interfaces
- InBand and OutBand Management
- SM-OS based platform
- Packet Fragmentation to minimize jitter
- Integrated flat antenna
- Synchronous Ethernet and IEEE 1588v2 support
- CISCO Microwave Adaptive bandwidth feature interworking

## 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
- HQoS enhanced service management
- RMON Statistics

## TYPICAL APPLICATIONS

- Any-G Mobile Backhaul for Access and aggregation
- CRAN, CPRI front haul 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
- Single Network Element concept towards NMS
- Power over Ethernet and integrated lightning protection to direct feed All Outdoor equipments
- TDM connectivity



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