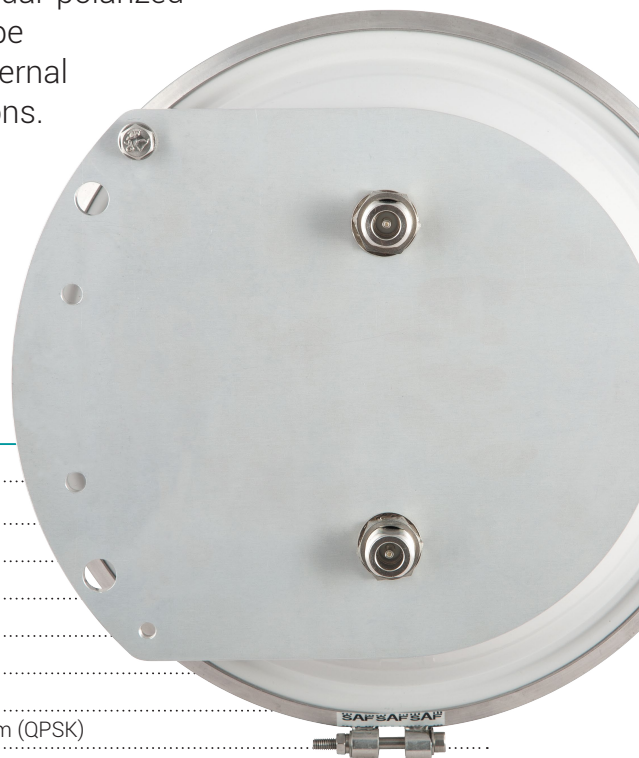# FreeMile 5 GE MIMO

carrier-grade radio for Ethernet packet data transmission

- System is small packet transfer capacity optimized, supports up to 80k fps

- Gigabit Ethernet traffic interface with built-in surge and lightning protection

- 2 x 2 MIMO radios delivering up to 210 Mbps aggregated Ethernet capacity (at 1518 bytes frame size)

- Carrier grade metal enclosure, IP67 ingress protection, industrial grade EMC protection

- Carrier grade MW radio mount - easy to install, robust and corrosion resistant

- Supports PoE (802.3af; DC input 36-60 V), any polarity to ground.

- SAF PoE Injector with surge and lightning protection supports DC input voltage range 24-60 V, included with every radio.

- Low packet latency (2ms one way), ideal for real-time applications such as VoIP or video Surveillance.

- Integrated 23dBi dual-polarized antenna or 2 N-type connectors for external antenna applications.

FreeMile 5GE MIMO TDD

Frequency band and range	5 GHz (5.180 – 5.825 GHz)
Duplexing scheme	Time Division Duplexing (TDD)
Channel bandwidth	20 / 40 MHz
Modulation	BPSK / QPSK / 16QAM / 64QAM
Wireless technology	2x2 MIMO
Operating mode	Point to point
Maximum transmit power	+28 dBm
RSL Threshold at BER 10-6	From -67 dBm (64QAM) up to -94 dBm (QPSK)
ACM (Adaptive Coding & Modulation)	Hitless
ATPC/DFS	Supported
Data encryption	Hardware based AES
Antenna	FreeMile-5-GE-N: 2 x N-type connectors for external antenna FreeMile-5-GE-23: Integrated 23 dBi dual polarized panel
Traffic interfaces	Gigabit Ethernet
Ethernet throughput	210 Mbps Tx+Rx aggregated
Max packets per second	Up to 80 000
Packet latency	2 ms (64 bytes packet)
Temperature range	-33°C to +55°C
Ingress protection	IP67
Surge Arrestor	Built-in surge arrestor for Power and Data lines
Input DC voltage	PoE 36 – 60 V DC (802.3af compatible)
Power consumption	10W