

Go 100Mbps Full Duplex License Free! →

SAF FreeMile™ 24



SAF FreeMile 24 all outdoor system is a new generation license free 24GHz ISM band radio for Ethernet packet data and E1 voice transmission. The new radio system combines excellent features like interference-free operation, high availability, Carrier grade full duplex capacity with no cost of licensing and quick installation, traditionally associated with ISM radios. SAF FreeMile radio also provides user-friendly Web browser based management interface and straightforward installation process to ensure trouble-free experience for any user.

GENERAL

Frequency band and range	24GHz (24.05-24.25)
Duplex (Tx, Rx) offset	100 MHz, cross-polar
Channel bandwidth	10 / 30 MHz
Modulation	QPSK / 16QAM / 32QAM / 64QAM
Capacity range	100 Mbps Eth / 2 x E1/T1
Max. permitted radiated power	+20dBm (100mW) e.i.r.p.*

PORTS

Antenna flange	Circular, 10.3mm
Ethernet with power over	RJ-45 (data traffic, management port, power)
Ethernet cable	
Balanced 2xE1/T1	1xRJ-45

ETHERNET

QoS	64 level DiffServ (DSCP) or 8 level 802.1p mapped in 4 prioritization queues with VLAN support
Max frame size	1916 bytes
Flow Control	Yes
802.1q VLAN support	Up to 15 concurrent traffic VLANs
Spanning Tree	802.1d-1998 STP

CHANNEL PLAN

10MHz channels		30MHz channels	
TX (MHz)	RX (MHz)	TX (MHz)	RX (MHz)
1	24055	24155	
2	24065	24165	24065
3	24075	24175	24165
4	24085	24185	
5	24095	24195	24095
6	24105	24205	24195
7	24115	24215	
8	24125	24225	24125
9	24135	24235	24225
10	24145	24245	

PERFORMANCE

Configuration	1+0
Traffic Interfaces	100Mbps FE (RJ-45) / 2xE1 (RJ-45)
Tx Power tuning range	-25 to -15 (dBm)
RSL Threshold at BER 10 ⁻⁶ , 30MHz, 32QAM, 100Mbps	-77 (dBm)
ACM (Adaptive Coding & Modulation)	Hitless

MANAGEMENT FEATURES

Management Port	RJ-45 (in-band, optional VLAN tag.)
RSSI	LED on FODU, WEB management
TCP/IP	WEB, SNMP, Telnet - local & remote
Monitoring	Via Telnet, WEB GUI, SAF NMS, SNMP Manager
Loopbacks	Yes, E1, modem, RF loopback

MECHANICAL & TECHNICAL

Stationary use	Ref. ETSI EN 300 019-2-4, class 4.1E; non weather-protected locations
Temperature range	-33°C to +55°C
Dimensions:	230 x 230 x 85 / 2
HxWxD, mm / weight, kg	
Input DC voltage	48 V DC ±10%
Max. power consumption	<15W

CAPACITY MODES

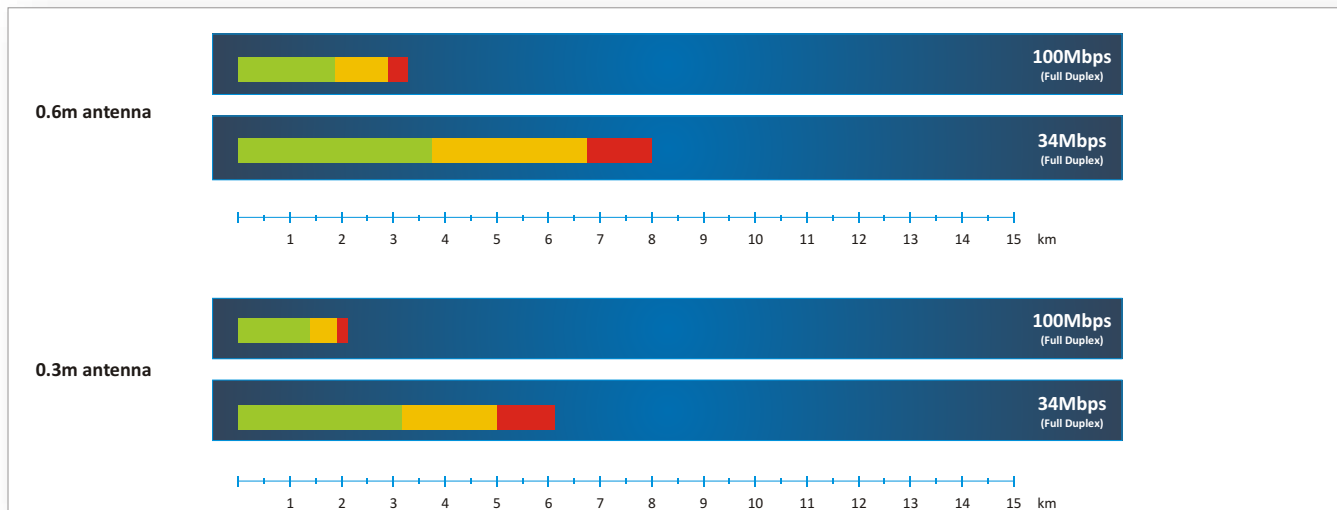
Eth. (Mbps)	2E1 (Mbps)	2T1 (Mbps)
10MHz channel, 32QAM		
27	4	-
28	-	3
31	-	-
10MHz channel, 64QAM		
37	4	-
8	-	3
41	-	-
30MHz channel, 32QAM		
100	4	-
100	-	3
100	-	-

* SRD Short Range Device

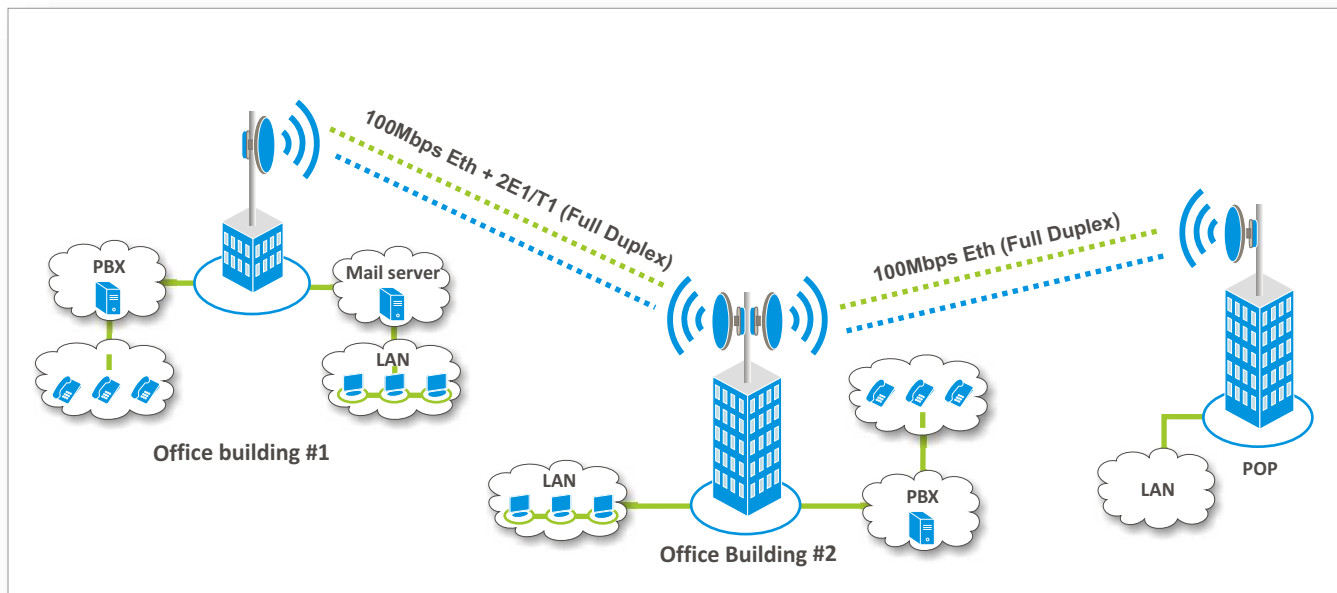
PRODUCT HIGHLIGHTS

- Full duplex capacity 100Mbps and 2E1
- Low interference comparing to links in 2.4GHz and 5.8GHz
- Hitless modulation switching (ACM) feature ensures high availability even at bad weather conditions
- Easy configuration from Web interface and up-to-date network management over SNMP protocol
- Radio polarization sensor for easier installations
- RF Spectrum analyzer

DISTANCES



CORPORATE WIRELESS NETWORK



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