

# SAF Tehnika

SAF Tehnika is a Latvian (Europe) designer, producer and distributor of digital microwave data transmission equipment. SAF Tehnika products provide wireless backhaul solutions for digital voice and data transmission to mobile and fixed network operators, data service providers, governments and private companies.

## Overview of SAF CFOL Products



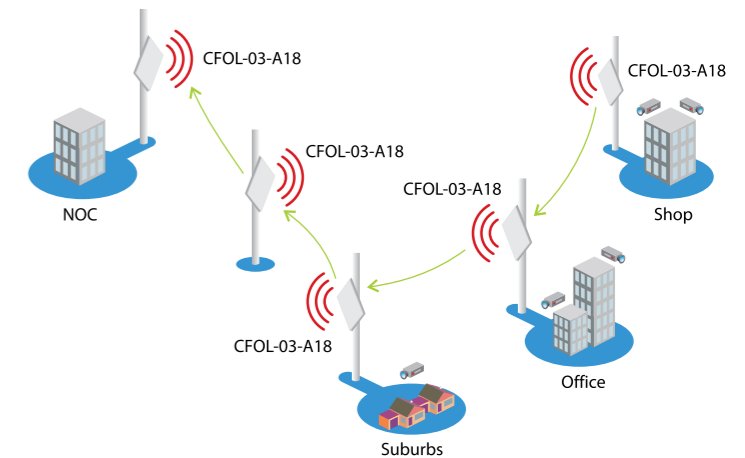
Model	CFOL-02	CFOL-03	CFOL-04	CFOL-05 High Power	CFOL-05 Wide Power	CFOL-05-MIMO	CFIP-108/106	CFIP Lumina
<b>Max. capacity (Mbps)</b>	Up to 40 Mbps @ 20 MHz (Aggregated Capacity)	Up to 70 Mbps @ 40* MHz (Aggregated Capacity)	Up to 40 Mbps @ 20 MHz (Aggregated Capacity)	Up to 70 Mbps @ 40* MHz (Aggregated Capacity)		Up to 180 Mbps @ 40* MHz (Aggregated Capacity)	100Mbps Eth + 4xE1/T1 (Full Duplex)	366Mbps Ethernet (Full Duplex)
<b>Duplexing Scheme</b>	Dynamic Time-Division Duplexing (TDD)						Frequency Division Duplexing (FDD)	
<b>Frequency Range</b>	2.400 GHz ~ 2.483 GHz	3.35 GHz ~ 3.70 GHz (Country Dependent) 3.650 ~ 3.675 GHz (USA Operating Range)	4.94 GHz ~ 4.99 GHz	5.180 GHz ~ 5.875 GHz			24.05 - 24.25 GHz	
<b>Channel bandwidths (MHz)</b>	5/10/20 MHz	5/10/20/40* MHz	5/10/20 MHz	5/10/20/40* MHz		20/40* MHz	7/14/28 MHz	28/40/56 MHz
<b>Modulations</b>	OFDM - Variable modulation range (64QAM, 16QAM, QPSK, BPSK) with ACM							
<b>Performance</b>								
<b>Receiver Sensitivity</b>	20MHz channel BPSK: -92 dBm ± 2 dBm QPSK: -87 dBm ± 2 dBm 16QAM: -80 dBm ± 2 dBm 64QAM: -74 dBm ± 2 dBm	20MHz channel BPSK: -92 ± 2 dBm QPSK: -88 ± 2 dBm 16QAM: -81 ± 2 dBm 64QAM: -73 ± 2 dBm	20MHz channel BPSK: -93 ± 2 dBm QPSK: -90 ± 2 dBm 16QAM: -83 ± 2 dBm 64QAM: -76 ± 2 dBm	20MHz channel BPSK: -94 ± 2 dBm QPSK: -90 ± 2 dBm 16QAM: -83 ± 2 dBm 64QAM: -76 ± 2 dBm		20MHz channel BPSK: -92 ± 2 dBm QPSK: -88 ± 2 dBm 16QAM: -81 ± 2 dBm 64QAM: -75 ± 2 dBm	28MHz channel (strong/weak FEC) QPSK: -87/-84 dBm 16APSK: -81/-78 dBm 32APSK: -77/-75 dBm 64QAM: -78 dBm 128QAM: -75/-71 dBm	56MHz channel (strong/weak FEC) QPSK: -85/-81 dBm 16APSK: -77/-74 dBm 32APSK: -76/-73 dBm 64QAM: -73/-69 dBm 128QAM: -70/-67 dBm 256QAM: -66/-62 dBm
<b>RF Output Power Range</b>	0 to +24dBm	+11 to +26dBm	0 to +23dBm	+14 to +27dBm	0 to +25dBm	2x23 dBm - Adjustable	3 dBm - Adjustable	3 dBm - Adjustable
<b>Error Correction</b>	ARQ (Selective Repeat), FEC						FEC (Forward Error Correction)	
<b>64 bytes packet latency</b>	2ms				2ms		0.2ms	
<b>Management features</b>								
<b>Management</b>	Web GUI; Command line management via SSH, SNMP V1/2/3 with traps supporting MIBs: 802.1, 802.1x, MIBII; Syslog support						Telnet, WEB GUI, SAF NMS, SNMP Manager	
<b>Security</b>	Password Protection; AES Encryption; SSH Configuration Option						Password protection	
<b>Mechanical &amp; Electrical</b>								
<b>Operating Environment</b>	Temperature: -20°C ~ +60°C Humidity: 0 ~ 95% (non-condensing)						-33°C ~ +55°C, 100% all weather	
<b>Power Supply</b>	Power over Ethernet, 48V DC; AC/DC Integrated PoE Power Supply Included, Dual-layer Ethernet surge protection						Power over Ethernet	-48 V DC ±10%
<b>Max DC Power Consumption</b>	10 - 17 W	10 - 17 W	10 - 17 W	10 - 17 W		13 - 20W	19-26 W	25-33 W
<b>Antenna</b>	Integrated 19 dBi Panel / N-type connector	Integrated 18 dBi Panel / N-type connector	Integrated 19 dBi Panel / N-type connector		Integrated 23 dBi Panel / N-type connector	2x Integrated 23 dBi Panel / N-type connector	Circular flange for external antenna	

\*Note: 40 MHz channel width capability is dependent on spectral availability (country dependent)

## Video Surveillance

Perfect for high-bandwidth video feeds  
Various Scenarios

- Corporate video cameras
- City-wide camera deployment
- Remote camera installation



## Last Mile Access

- Business customers
- High bandwidth customers
- Isolated customers

