

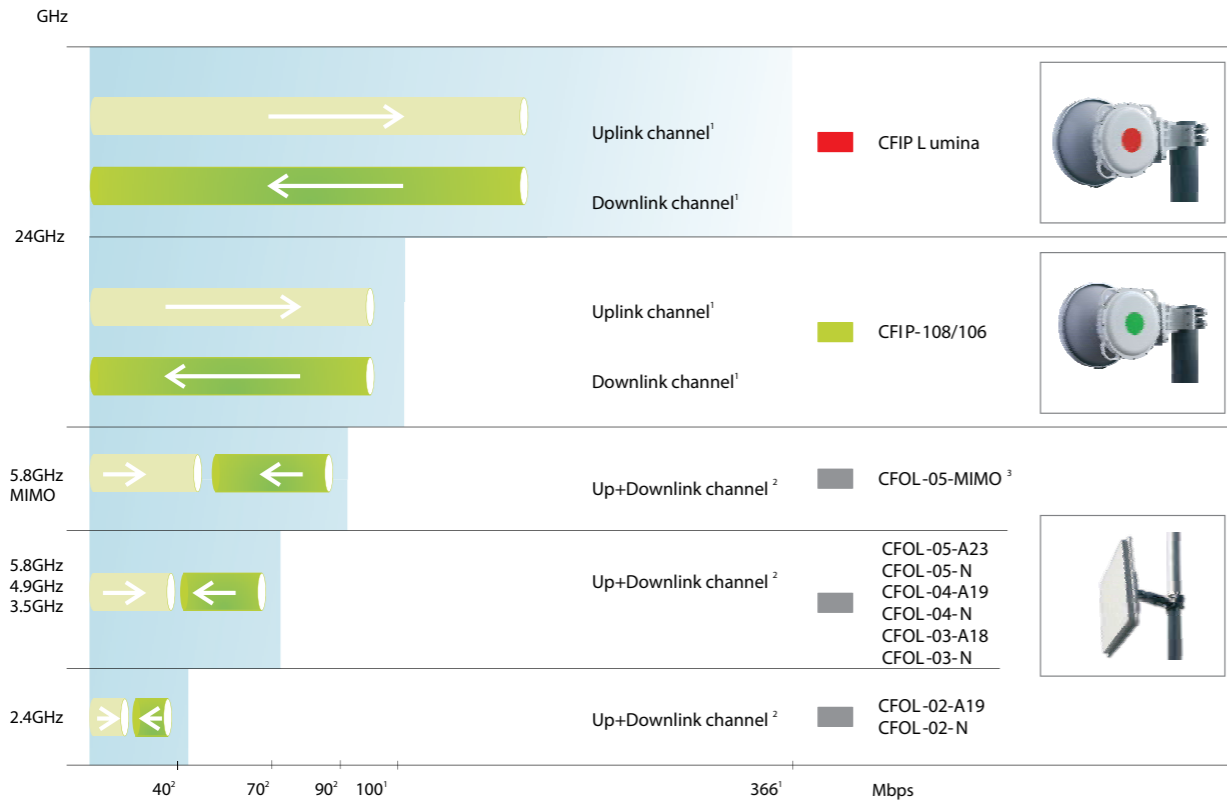


CFOL – license free band
Microwave radio series

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



1 Full Duplex (FDD); 2 Aggregated capacity (TDD); 3 Under development

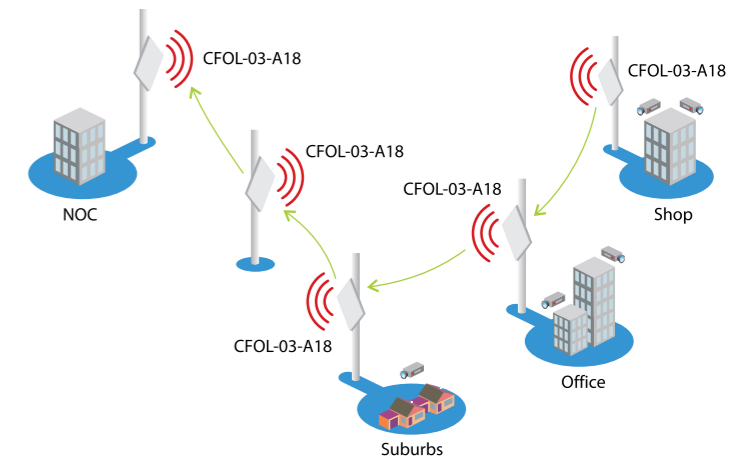
| Model | CFOL-02 | CFOL-03 | CFOL-04 | CFOL-05 High Power | CFOL-05 Wide Power | CFOL-05 Low Power | CFOL-05-MIMO | CFIP-108/106 | CFIP Lumina | |
|--|--|---|---|---|---------------------|---------------------|---|--|---|--|
| Max. capacity (Mbps) | Up to 40 Mbps @ 20 MHz (Aggregated Capacity) | Up 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) | |
| Duplexing Scheme | Dynamic Time-Division Duplexing (TDD) | | | | | | | Frequency Division Duplexing (FDD) | | |
| Frequency Range | 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 | | |
| Channel bandwidths (MHz) | 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 | |
| Modulations | OFDM - Variable modulation range (64QAM, 16QAM, QPSK, BPSK) | | | | | | | | | |
| Performance | | | | | | | | | | |
| Receiver Sensitivity (widest channel) | 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: -88 ± 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 |
| RF Output Power | 24 dBm - Adjustable | 26 dBm - Adjustable | 23 dBm - Adjustable | 24 dBm - Adjustable | 25 dBm - Adjustable | 27 dBm - Adjustable | 2x23 dBm - Adjustable | 3 dBm - Adjustable | 3 dBm - Adjustable | |
| Error Correction | ARQ (Selective Repeat) | | | | | | | FEC (Forward Error Correction) | | |
| 64 bytes packet latency | 2ms | | | | 2ms | | | 0.2ms | | |
| Management features | | | | | | | | | | |
| Management | 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 | | |
| Security | Password Protection; AES Encryption; SSH Configuration Option | | | | | | | Password protection | | |
| Mechanical & Electrical | | | | | | | | | | |
| Operating Environment | Temperature: -20°C ~ +60°C Humidity: 0 ~ 95% (non-condensing) | | | | | | | -33°C ~ +55°C, 100% all weather | | |
| Power Supply | Power over Ethernet, 9-48V DC; 18V/1.0 A Integrated PoE Power Supply Included, Dual-layer Ethernet surge protection | | | | | | | Power over Ethernet | -48 V DC ±10% | |
| Max DC Power Consumption | 10 - 17 W | 10 - 17 W | 10 - 17 W | 10 - 17 W | | | 13 - 20W | 19-26 W | 25-33 W | |
| Antenna | 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

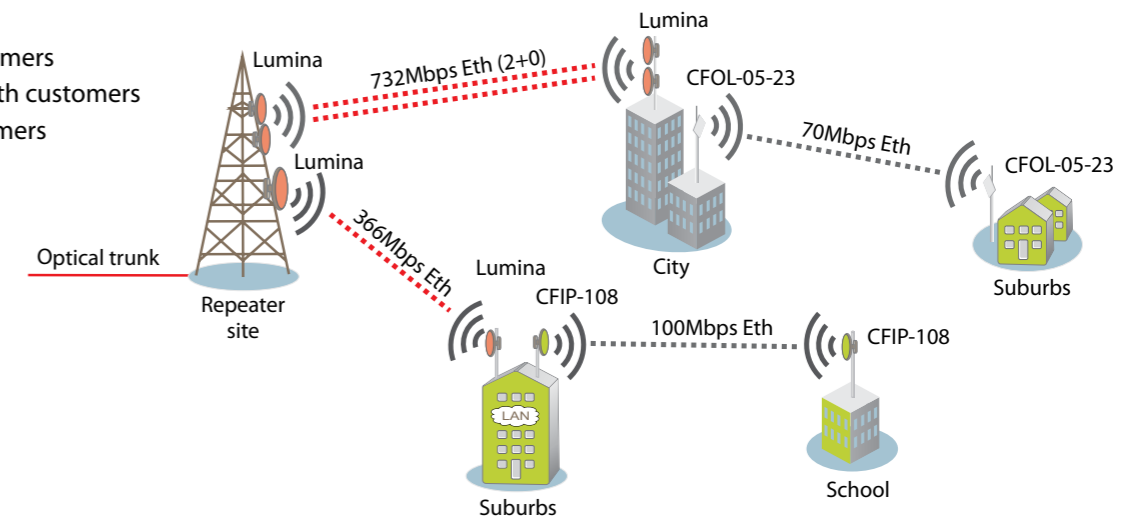
Perfect for high-bandwidth video feeds
Various Scenarios

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




Last Mile Access

- Business customers
- High bandwidth customers
- Isolated customers





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