

## FDMLS 2W DATA LINK

### GENERAL DESCRIPTION

FDMLS 2W Data Link is a compact, high data rate digital datalink for UAV Intelligence, Surveillance and Reconnaissance missions. It is a module solution which can handle replaceable uplink and downlink data together. For downlink, video and telemetry data can be multiplexed inside the airborne module and demultiplexed by the ground module to be displayed on the user interface of the operator.

FDMLS 2W Data Link can be operated full duplex in L Band and S Band up to 10 Mbps data rate. Higher data rates can also be offered as an option for specific applications. Modulation type can be selected in between CPFSK, MSK and PSK.

In standard hardware, high data rate modem, 5W/10W power amplifiers, high gain LNA and diplexer is integrated in the module so that it can be operated via single L/S Band antenna. 5W power amplifier and two antenna interface can also be supplied as an option.

Compact size and low power consumption allow airborne terminals to be used in mini, midi and tactical UAVs. Having approximately the same dimensions, ground module can also be used in mobile terminals.

FDM LS 2 W Data Link has fully transparent 10/100 Base-T Ethernet and RS 232/422/485 data interfaces. H.264 Video encoder is also available optionally. It can directly be operated with any IP camera. Data security is satisfied via AES 256 encryption algorithm. Reed Solomon (RS) and Convolutional and LDPC error correction encoding and decoding capability highly improves receiver sensitivity for different data rates.

### KEY SPECIFICATIONS

- Full Duplex Operation
- High Efficiency
- Up to 10 Mbps Data Rate
- Low Power Consumption
- Integrated Duplexer, PA and LNA
- Ultra Compact Size
- Light Weight
- Transparent Operation



FDM LS 2W Data Link

### TECHNICAL SPECIFICATIONS

<b>Frequency Range</b>	L Band, S Band
<b>Data Rate*</b>	Up to 10 Mbps
<b>RF Output Power</b>	2W
<b>Modulation Type</b>	CPFSK / MSK / PSK
<b>ECCM (Optional)</b>	FHSS or DSSS
<b>FEC</b>	Reed Solomon (RS) and Convolutional
<b>Data Encryption</b>	AES 256
<b>Data Interface</b>	Ethernet RS 422/485 RS 232
<b>Power Consumption</b>	< 15W
<b>Dimensions (cm)</b>	8.2 x 6.1 x 3.6
<b>Weight</b>	315 g

\* Contact TUALCOM for higher data rate requirements

#### TUALCOM

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