

Actox FSK M&C Modem

AMFSK-MDM

User Manual

Introduction

This User Manual is for Actox FSK M&C Modem - AMFSK.

Modem is designed for monitoring and control of Block Up Converter or other outdoor unit in sat. earth station, which has embedded FSK interface. In this case RF Cable is used for transfer of all multiplexed signals between Indoor and Outdoor Units: DC; L-Band IF; 10MHz Reference and FSK signals.

Specification

Transmitter

Frequency	650 KHz +/-5%;
FSK deviation	+/- 60 KHz Nominal (+60 KHz mark);
Deviation tolerance	+/- 50 KHz minimum ; +/-70 KHz maximum;
Output Level	-5 to -15 dBm;
Start Tone	710 KHz;
Start Tone time	10 ms minimum;
Output impedance	50 OHM;

Receiver

Locking range	+/- 32.5 KHz;
Input impedance	50 OHM;
Input Sensitivity	-15 dBm;

Data Serial Interface

RS-232	
Baud Rate	9600 bps;
Data Bits	8;
Parity	None;
Stop Bite	1;
Connector	DB9F;

USB Optional;

IF Interface

Connectors	N-Type / F-Type;
Transparent for	L-Band IF, 10 MHz, ODU DC Power Supply;

Modem Power supply	6 V DC ~ 12 V DC @ 0.1A;
Dimension	158(L) x 67(W) x 31(H) mm;

Description

Actox FSK M&C Modem AMFSK permits the user to configure, monitor, and control an Outdoor RF Transceiver (often referred to as an ODU, or Outdoor Unit: Block Up Converters, Block Down Converters).

Several brands of ODU have the capability to communicate with a Sat. Modem using an FSK signal multiplexed into the IF output connector along with the Tx IF signal, 10 MHz reference and DC Power Supply.

Actox FSK M&C Modem enables the operator to monitor and control the ODU (BUC) from the PC connected to FSK M&C Modem using RS-232 (USB Optional available) Interface when Sat. Modem does not support the FSK Option.

Modem is transparent for any link protocol and can support both, ASCII and Binary Mode link protocol.

Actox FSK Modem Functional Diagram depicted on Fig.1.

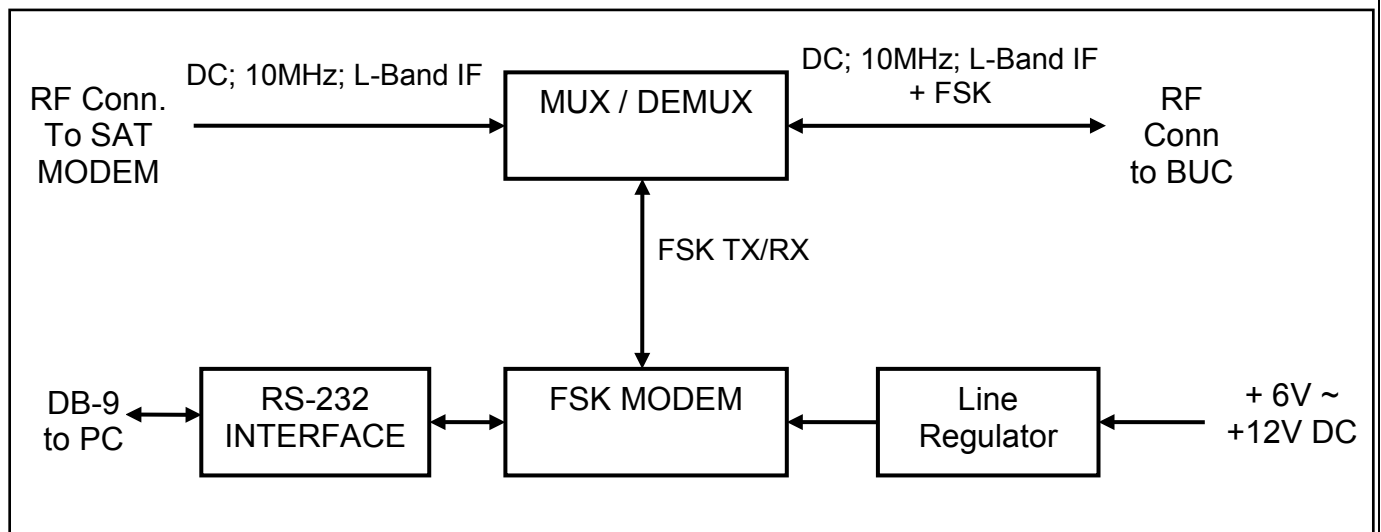


Fig.1. Actox FSK M&C Modem Functional Diagram.

Actox FSK Modem external view depicted on Fig.2

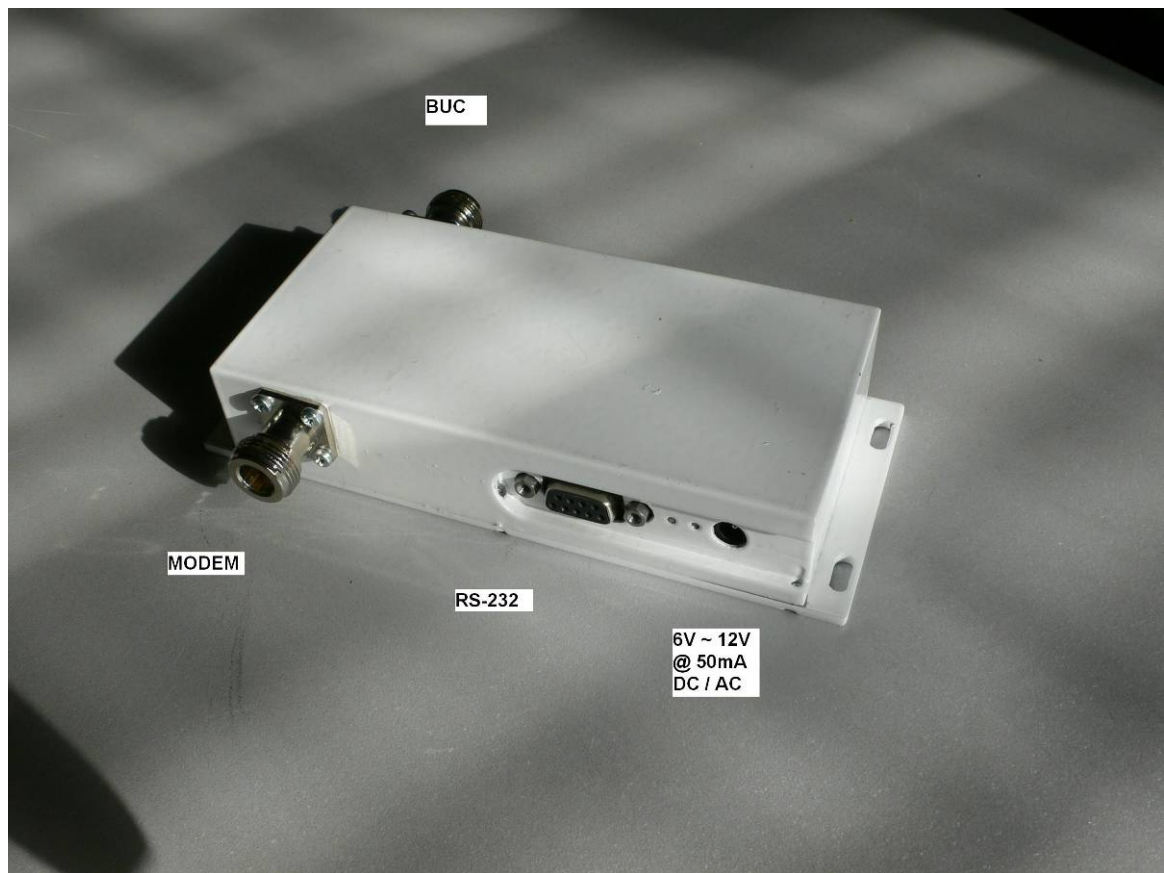


Fig.1. Actox FSK M&C Modem external view.

System configuration block diagram drawing depicted on Fig.3, and Fig.4.

NOTE:

If BUC has both RS-232 and FSK M&C interface, ONLY ONE connection can be used.

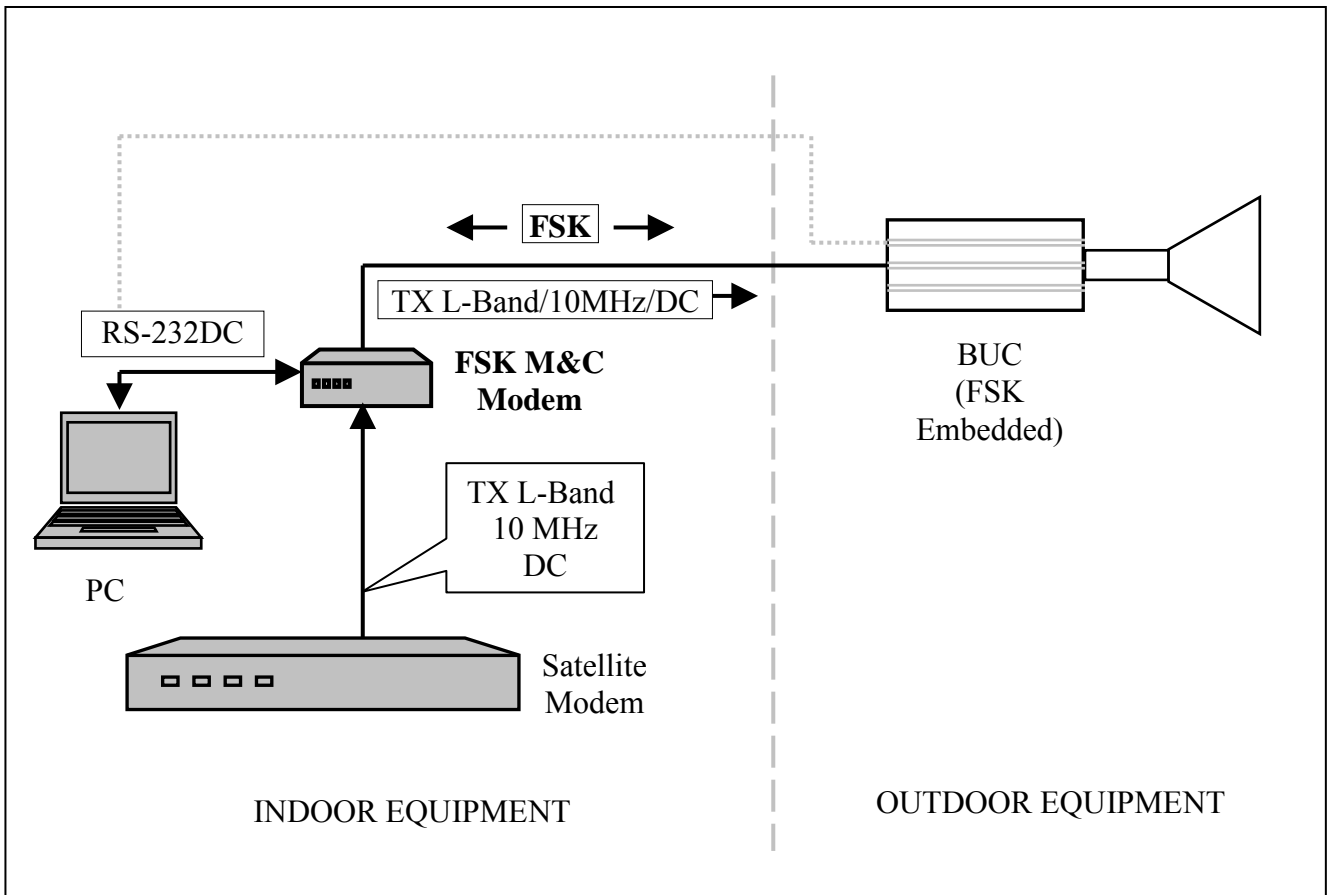


Figure 3. System configuration with FSK Modem (BUC with FSK Embedded)

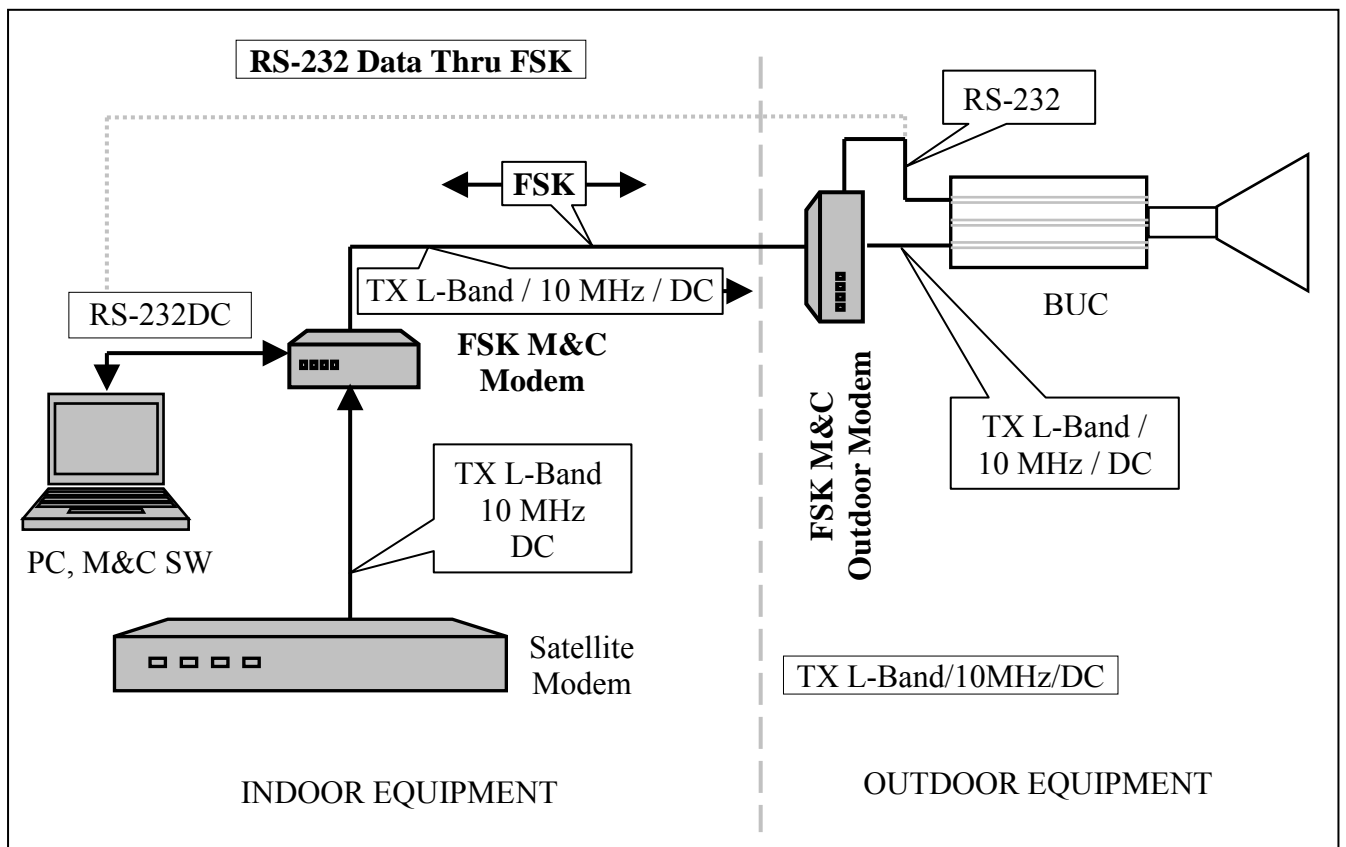


Figure 4. System configuration with FSK Modem (BUC without FSK Embedded)