

# YAT-UHF101

## Ultra High Frequency

The YAT-UHF101 is used for transmitting command from the mission control system to the aircraft. Because the YAT-UHF101 uses a comparatively low frequency of 430MHz band, it is more stable than using a relatively high frequency when data is sent away. Also it is possible a stable transmission when there are a lot of obstacles. In addition, the YAT-UHF101 use the Manchester coding. The YAT-UHF101 better protects a data from noises owing to the Manchester coding.

### Features

- Using the 430MHz band
- Suitable for both short and long distance wireless communication
- Using the Manchester coding
- Data rate up to 9600 bps
- Serial communication : RS-232, RS-485

### Applications

- Security systems
- Remote control systems
- Wireless data transmitter/receiver

### Architecture

The YAT-UHF101 is divided into the transmitting part and the receiving part. The transmitting part consists of the transmitter and the board for communicating with the computer. And the receiving part consists of the receiver and the board for communicating with the digital flight control computer.



Fig. 1. Transmitting part



Fig. 2. Receiving part

## Specification

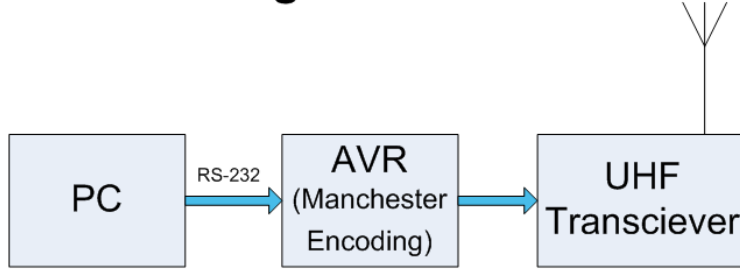
### 「 YAT-UHF101 」

Transmitting Part	
<b>Performance</b>	
Frequency (MHz)	430 (programmable)
Transmitting rate (bps)	Up to 9600 (programmable)
Output power (dBm)	10
Max. range (m)	50
Operating Temperature (°C)	-20 ~ 50
<b>Physical</b>	
PCB size (mm)	00 × 00 × 00 [W × H × D]
PCB weight (g)	00
CASE size (mm)	00 × 00 × 00 [W × H × D]
CASE weight (g)	0
Antenna interface	SMA-J
<b>Electrical</b>	
Supply voltage (Vdc)	12
Consumption current (mA)	80 [@12Vdc]
Impedance (Ω)	50
Input data interface	RS-232

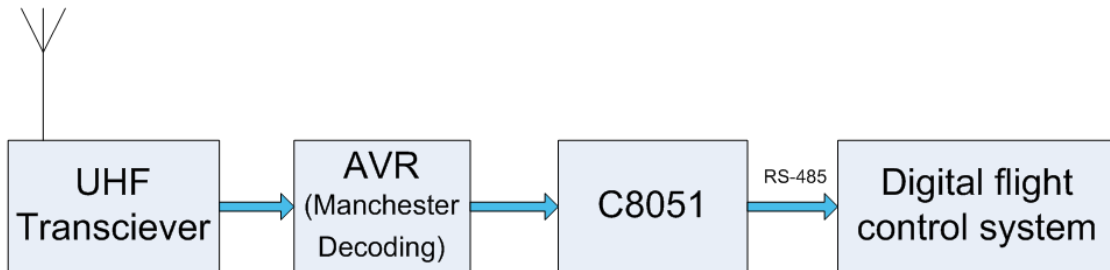
Receiving Part	
<b>Performance</b>	
Frequency (MHz)	430 (programmable)
Receive sensitivity (dBm)	-112
Operating Temperature (°C)	-20 ~ 50
<b>Physical</b>	
PCB Size(mm)	00 × 00 × 00 [W × H × D]
PCB Weight(g)	00
CASE Size(mm)	00 × 00 × 00 [W × H × D]
CASE Weight(g)	00
Antenna interface	SMA-J
<b>Electrical</b>	
Supply voltage (Vdc)	5, 3.3
Consumption current (mA)	100 [@9Vdc]
Impedance (Ω)	50
Output data Interface	RS-485

Block Diagram

<Transmitting Part>



<Receiving Part>



Drawing

