

MicroPower Network Telemetry Modem

The ANS family comprise Hi Performance MicroPower Wireless Network Modem targeting demanding, long range tactical applications, like UAV/UGV Control Link, Telemetry, Critical Control Back-up Links, Wearable Systems and many more.

The ANS modem provide outstanding budget-link of more than 150 dBm (without antennas) and can serve the need for LOS and Non-LOS applications. Special attention and efforts have been invested to perform ultra-low-power consumption for portable, battery-based applications. Beside very low power consumption different modes (down to 2 μ A StandBy mode) , the ANS provide feature-rich set of options to further decrease power consumption.

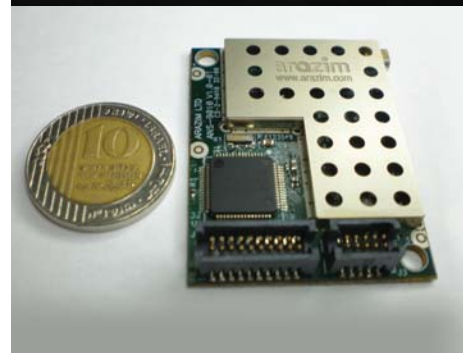
The ANS family is Network-ready platform for use with various network topologies, like Master-Slave, TDMA, FDMA, Ad-Hoc / MESH and more. Customized network protocols are available upon request.

Highlights

- Multiple sub-GHz ISM frequencies.
- Up to 150 Kbps Data rate (optional 600 Kbps)
- Ultra Low power Consumption
- Small form factor
- Network Ready platform (PtP, Master/Slave, AD-Hoc, MESH)

Applications

- UAV / UGV Data Links
- D/GPS systems
- Soldier / Wearable Tactical Data Links
- Telemetry Applications



Specifications	ANS90100	ANS40100
Frequency Range	902 - 928 MHz	426 – 442 MHz
Modulation	FSK / FHSS	
RF Data Rate	4.8 Kbps - 153.2 Kbps , NRZ coding	
Output Power	5 mW - 1000 mW	1000 mW
Sensitivity		
4800 Bps	-116 dBm	-113 dBm
150 Kbps	-100 dBm	-98 dBm
Encryption	Random + RC4 (optional AES128)	
Error Detection	16-bit CRC	
Impedance	50Ω	
Frequency Stability	2.5 ppm	
Receiver Filter (SSB)	7KHz - 400 KHz programmable	
Input Voltage	3.3 VDC	
Current Consumption		
StandBy Mode	< 5 μA	
Receive Mode	< 30 mA	< 30 mA
Transmit Mode	< 900 mA	< 1300 mA

Communications

Interface: RS232, CMOS level

Baud Rate: 1,200 bps - 115,200 bps

Mechanical

Weight: < 12 gram

Power/Data Connector: Samtec Micro Mate Header TFM

Environmental

Working Temperature: -20° to +70° C

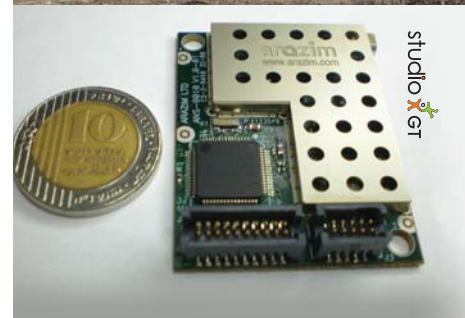
Storage Temperature: -40° to +85° C

Humidity: 95% non-condensing

Options

- Off-the-Shelf Piggy-Back for various Power & Communication options
- Different Frequencies at the sub-GHz band
- Higher Data Rate – up to 600 Kbps
- Higher Output Power – by external Power Amplifiers
- Encryption – AES128
- Customized Network Protocols

Specification subject to change without notice



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