

Wireless Data Acquisition System

Preliminary data sheet

FEATURES

- Easy to integrate and low cost
- Small size, easy to deploy
- Up to 8 Unipolar Channels
- 16 Bit resolution and 100sps maximum throughput
- Up to 2 UART I/P Channels for digital data transmission (Bidirectional)
- Wireless range up to 500 meters (LOS)
- RS232 Interface with PC at monitoring site
- Easy to Integrate with MATLAB, Lab-View, Octave

APPLICATIONS

- Industrial parameter monitoring
- Lab instrumentation
- Remote location data gathering
- Environmental Monitoring
- Structural Monitoring and Analysis
- Automation and control



DESCRIPTION

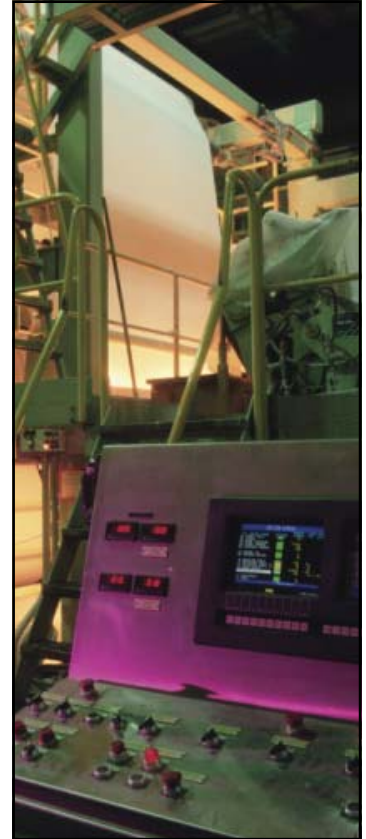
ARN-WiDQ series wireless data acquisition system is a low-cost high performance unit. The module makes it possible to monitor analog signals as well as digital information from remote locations as far as one kilometer away. There are up to 8 single-ended analog input channels and up to 2 UART channels which will come handy in telemetry applications. ARN-WiDQ's advanced technology lets you measure signals and collect information accurately at a fast rate.

ARN-WiDQ owes its performance to faster-processing (with ARM7 core built-in), advanced statistical filtering mechanism employed to give it an edge over other systems. The systems may be used for various parameter monitoring, signal noise measurement, monitoring and control, industrial automation, health monitoring and a host of other applications.



SPECIFICATIONS

Parameter	Value/Description	Units
Analog Inputs		
No. of Inputs	8 Single-Ended	
Input Range	0 – 5 (Buffered)	V
Input Impedance	>10M	Ω
Input Bias Current	1	pA
Resolution	16Bit	
Digital Inputs		
No. of UARTS (Serial ports)	2	
Logic Levels	3V and 5 V compatible Inputs	
Output Voltage	Low – 0V, High - 3.3V (Typ.)	
Baud Rate	9600	bps
General/Performance		
Output rate*	1–100	Hz
Wireless Range	500m Line of sight 100m Indoor	
Operating Temperature	0 - 70	$^{\circ}\text{C}$
Weight	< 500	gm
Dimensions	120 (L) x 60 (H) x 90 (D)	
Calibration	1	year
Power Requirement		
Ext. Voltage Input	Min – 8, Max - 12	VDC
Current Consumption	<200	mA



* Factory configurable

Contact us for detailed product information.