

ADAM-2017PZ

Wireless 6-ch Analog Input Node with Power Amplifier



Back to TOC



Back to Section Front



Previous



Next



Features

- IEEE 802.15.4 Wireless Standard
- Support Star/Tree/Mesh Network Topology
- Modbus Communication Protocol
- Low Power Consumption
- LED Indicators

Introduction

The ADAM-2017PZ is a wireless module with 6 analog input channels to measure the voltage and current. Its low power design allows it to be powered by 2 AA Alkaline batteries, making it an ideal module for remote data acquisition in a wide area.

Specifications

General

- **Connectors** 1 x plug-in terminal block (#14 ~ 22 AWG)
- **Power Input** Unregulated 10 ~ 30 V_{DC}
- **Battery Input** 2 x AA Alkaline
- **Power Consumption** 0.3 W @ 24 V_{DC}
Battery AA * 2
420 uW @ 3 V_{DC} (1 minute Tx Interval)
240 uW @ 3 V_{DC} (2 minute Tx Interval)

Wireless Communications

- **IEEE Standard** IEEE 802.15.4
- **Modulation Type** DSSS (OQPSK)
- **Frequency Band** ISM 2.4 GHz (2.4 GHz ~ 2.4835 GHz)
- **Channels** 11 ~ 26
- **RF Data Rate** 250 Kbps
- **Transmit Power Type** 19 ± 1 dBm
- **Receiver Sensitivity** -97 dBm
- **Topology** Star / Tree / Mesh
- **Outdoor Range** 1000 m with line of sight
- **Function** End Device

Analog Input

- **Channels** 6 Non-Isolation (Differential)
- **Input Max Voltage** +/-15V
- **Common Mode Volts** 10 V_{DC}
- **Input Impedance** >10 MΩ (Voltage), 120Ω (Current)
- **Input Type** mV, V, mA
- **Input Range** ±150mV, ±500mV, ±1V, ±5V, ±10V,
±20mA, 0~20mA, 4~20 mA
- **Accuracy** Voltage: +/-0.1% or better (Current) at 25°C
Current: +/-0.2% or better (Current) at 25°C
- **Span Drift** ±25 ppm/°C
- **Zero Drift** ±6 μV/°C
- **Resolution** 16-bit
- **Sampling Rate** 12 samples/second (total)
- **CMR @ 50/60 Hz** 100 dB
- **NMR @ 50/60 Hz** 65 dB

Environment

- **Operating Temperature** External Power -20°C ~ 70°C (-4°F ~ 157.9°F)
Battery Power 0°C ~ 50°C (32°F ~ 122°F)
- **Storage Temperature** -40°C ~ 85°C (-40°F ~ 184°F)
- **Operating Humidity** 20~95% RH
- **Storage Humidity** 0~95% RH

Ordering Information

- **ADAM-2017PZ** Wireless 6-ch Analog Input Node with Power Amplifier

View 3D Model

