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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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ADAM-2031Z

ADAM-2017PZ

ADAM-2051PZ

Wireless Temperature & Humidity Sensor Node
 Wireless 6-ch Analog Input Node with Power Amplifier
 Wireless Sensor Network 8-ch Digital Input Node with Power Amplifier



ADAM-2031Z



ADAM-2017PZ



ADAM-2051PZ



Features

- IEEE 802.15.4 Wireless Standard
- Supports Star/Tree/Mesh Network Topologies
- Modbus Communication Protocol
- Low Power Consumption
- LED Indicators
- Sensor Embedded

Specifications

Temperature Sensor Input

- Operating Range** -20°C ~ 70°C (-4°F ~ 157.9°F)
- Resolution** 0.02°C (0.04°F)
- Accuracy** ±2.0°C
- (Battery Mode)** ±1.0°C @ 25 ~ 40°C
- Response Rate** ±1°C/min.
- Long Term Drift** < 0.04°C/Year (0.07°F/Year)

Humidity Sensor Input

- Operating Range** 0 ~ 100% RH
- Resolution** 0.15% RH
- Accuracy** ±8.0% RH
- (Battery Mode)** ±6.0% RH @ 40 ~ 60% RH
- Response Time** 8 seconds (Achieving 63% of a step function)
- Long Term Drift** 0.5% RH/Year

General

- 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)
 150 uW @ 3 V_{DC} (5 minute Tx Interval)

Ordering Information

- ADAM-2031Z** Wireless Temperature & Humidity Sensor Node

Features

- IEEE 802.15.4 Wireless Standard
- Supports Star/Tree/Mesh Network Topologies
- Modbus Communication Protocol
- LED Indicators

Specifications

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 at 25°C
 Current: +/-0.2% or better at 25°C
 ±25 ppm/°C
- Span Drift** ±6 μV/°C
- Zero Drift** 16-bit
- Resolution** 12 samples/second (total)
- Sampling Rate** 100 dB
- CMR @ 50/60 Hz** 65 dB
- NMR @ 50/60 Hz** 65 dB

General

- Power Consumption** 0.5 W @ 24 V_{DC} (Battery AA * 2)
 380 uW @ 3 V_{DC} (1 minute Tx Interval)
 220 uW @ 3 V_{DC} (2 minute Tx Interval)
 130 uW @ 3 V_{DC} (5 minute Tx Interval)

Ordering Information

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

Features

- IEEE 802.15.4 Wireless Standard
- Supports Star/Tree/Mesh Network Topologies
- Modbus Communication Protocol
- LED Indicators
- Event Triggering

Specifications

Digital Input

- Channels** 8
- Input Resistance** 10 KΩ
- Input Level** Dry contact: Logic level 0: Close to GND
 Logic level 1: Open
 Logic level 0: 0-0.8 V max
 Logic level 1: 2.0 ~ 5.0 V
 Wet contact: (Note: The Digital Input Level 0 and 1 status can be inverted)

General

- Power Consumption** 0.3 W @ 24 V_{DC} (Battery AA * 2)
 380 uW @ 3 V_{DC} (1 minute Tx Interval)
 220 uW @ 3 V_{DC} (2 minute Tx Interval)
 130 uW @ 3 V_{DC} (5 minute Tx Interval)

Ordering Information

- ADAM-2051PZ** Wireless 8-ch Digital Input Node with Power Amplifier
- ADAM-2051Z** Wireless 8-ch Digital Input Node

Common Specifications

Wireless Communication

- 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 Typ.** 3 ± 1 dBm (ADAM-2031Z, ADAM-2051Z)
 15 ± 1 dBm (ADAM-2017PZ)
 19 ± 1 dBm (ADAM-2051PZ)
- Receiver Sensitivity** -97 dBm
- Topology** Star / Tree / Mesh

- Outdoor Range** 110 m with line of sight (ADAM-2031Z, ADAM-2051Z)
 1000 m with line of sight (ADAM-2017PZ, ADAM-2051PZ)
- Function** End Device

General

- Connectors** 1 x plug-in terminal block (#14 ~ 22 AWG)
- Power Input** Unregulated 10 ~ 30 V_{DC}
- Battery Input** 2 x AA Alkaline

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** -20°C ~ 70°C (-4°F ~ 157.9°F)
- Operating Humidity** 20 ~ 95% RH
- Storage Humidity** 0 ~ 95% RH