

CNI4 Dual-Channel Pulse Data Logger

Designed for C&I Smart Metering/AMI Analog Modem Applications

Brief Information

The CNI4 is a 4G/LTE, battery-operated, easy to configure dual-channel pulse data logger designed to support most commercial & Industrial (C&I) smart metering/automatic meter reading (AMR) analog as well as 2G/3G modem-based applications.

With this advanced cellular pulse data logger, both input channels and stored consumptions can be independently scaled to different units of measure, providing maximum value and flexibility.

The CNI4 Pulse Data Logger is designed for low-power and outdoor operation. It is ideal for call-In applications involving meter data management (MDM) and can directly connect to PowerSpring or couple with the InvisiConnect software to interface with third-party MDM systems.

The CNI4 is fully integrated in the Honeywell Mercury® Instruments ecosystem and is easy to program through its Bluetooth Low Energy interface and associated configuration software. The unit can be configured using the same MasterLink software that is used to configure Honeywell Mercury electronic volume correctors, data loggers and modems. No additional software is required. In addition, MasterLink is now available as an app that can be installed on IOS and Android devices.

The CNI4 is CSA Class I Div 2 approved, making it a perfect solution for gas measurement applications where safety is always a concern.



PRODUCT FEATURES

- Two independent output channels
- Low power requirements: 5-8 years with 4 Lithium batteries
- Field-proven composite material case with hinged door
- Easy software-based configuration
- Multi-vendor data collection capability
- Force-a-call feature

- Wireless communications Cloud Link 4G cellular modem
- Power control: Intended for batteryoperated wireless modem operation

Environmental

- -25°C to +65°C
- Ambient Humidity: 0 to 95% non-condensing

Software

- Configuration: MasterLink R510+ (Windows, IOS, Android)
- Data Collection: TDS, PowerSpring, DC2009, Itron MV90, and other third-party software providers

Data Inputs

- Min on pulse width: 150 ms/40 msMin off pulse width: 150 ms/60 ms
- Max bounce time: 10 ms/2 ms
- Max frequency: 3Hz 50% duty cycle, 10 Hz 40% duty cycle

Memory

• 1 year+ of hourly/10 user-specified log items

Firmware

• Field upgradable via Flash Program Memory

Pulse Input Circuit

- Full temperature range
- Max wetting current provided = 35 microamps
- Max transmitter leakage current 7 microamps
- Max Pulser + Line Resistance = 200 ohms
- Max line length = 300 feet

Parameter	Conditions	Min.	Typical	Unit
LTE Connectivity	Band 2, 4, 5, 13 and 17			
Receiver Input Sensitivity@ ARP (ch.bandwidth 5MHz)	LTE 700 Band 17	-97	-102	dBm
	LTE 700 Band 13	-98	-103	dBm
	LTE 850 Band 5	-98	-104	dBm
	LTE AWS Band 4	-100	-103	dBm
	LTE 1900 Band 2	-98	-103	dBm

Power

- 2 D-cell Lithium disposable battery pack for pulse accumulator
- 2 D-Cell Lithium disposable battery pack with super-capacitor for cellular radio

Certifications

- Class 1, Division 2, Group C & D
- PTCRB
- Verizon, AT&T, Rogers
- FCC

Security

- SSL/TLS 1.2
- Enclosure
- 20% glass-filled polycarbonate
- Weight: 3.7 lbs
- Wall-mount or meter-mount

Communications

- 4G/LTE cellular modem
- Operates with major carriers in North America: Certified with AT&T, Verizon, Rogers Falls back to UMTS/HSPA and GSM/GPRS Internal modem power control
- Bluetooth Low Energy interface can be used for wireless configuration
- Wireless specifications:
 - LTE: Five band, 700 (Bd13)/700 (Bd17)/850 (Bd5)/ AWS (Bd4)/1900MHz (Bd2)
 - UMTS/HSPA+: Triple band, 850 (BdV)/AWS (BdIV)/1900MHz (BdII)
 - GSM/GPRS/EDGE: Quad band, 850/900/1800/1900MHz
 - Bluetooth Low Energy: v.4.0 (2402- 2480MHz)

For more information

To learn more about Honeywell's Smart Gas Metering Solutions, visit www.honeywellprocess. com or contact your Honeywell account manager.

Honeywell Process Solutions

Mercury Instruments LLC 1280 Kemper Meadow Drive Cincinnati, OH 45240 Phone: +1 (855) 251-7065 Mercury® Instruments is a registered trademark of Honeywell International Inc.

