

ioLogik W5340

Active GPRS I/O with 4 AIs, 8 DI/DOs, and 2 relay outputs



- > GPRS, Ethernet LAN, RS-232/422/485 supported
- > Smart Active GPRS connection
- > Low power consumption
- > Secure wake on call ID
- > Active messaging with real-time stamp
- > Data logging with SD card
- > Unicode Active Messaging with real-time stamp, including SMS, SNMP Trap with I/O status, TCP, email
- > ioAdmin and Active OPC Server supported
- > Windows/WinCE VB/VC.NET and Linux C APIs



Introduction

The ioLogik W5340 is designed for cellular remote monitoring and alarm systems, such as automated river monitoring and pipeline monitoring. The ioLogik W5000 series uses GPRS technology to maximize the coverage of remote monitoring applications. This kind of

application needs cellular communications and I/O points connected to various sensors, including rainfall meters, flow meters, and water level detectors, since installing devices is usually difficult. They all enjoy the benefit of the GPRS communication feature of ioLogik W5340.

Specifications

Cellular

Interface: GPRS

Band Options: Quad-band 850/900/1800/1900 MHz

GPRS Multi-Slot Class: Class 10

GPRS Terminal Device Class: Class B

SMS: Point-to-Point Text/PDU

SIM Control Voltage: 3 V

LAN

Ethernet: 1 x 10/100 Mbps, RJ45

Protection: 1.5 KV magnetic isolation

Protocols: Modbus/TCP, TCP/IP, UDP, DHCP, Bootp, SNMP, SNTp

Serial Communication

Interface: 1 x RS-232/422/485, software selectable (9-pin D-Sub, male or 5-contact terminal block)

Baudrate: 1200, 2400, 4800, 9600, 19200, 38400, 57600, 115200 bps

Analog Input

Channels: 4 analog inputs with differential input

Resolution: 16 bits

I/O Mode: Voltage / Current

Input Range: 0 to 10 V, ± 10 V, ± 5 V, 0 to 20 mA, 4 to 20 mA

Accuracy:

• $\pm 0.1\%$ FSR @ 25°C

• $\pm 0.3\%$ FSR @ -10 and 55°C

Sampling Rate (all channels): 100 samples/sec

Input Impedance: 200K ohms (min.)

Built-in Resistor for Current Input: 102 ohms

DI/DO Configurable Channels

Channels: 8

I/O Mode:

• DI or Event Counter (up to 900 Hz)

• DO or Pulse Output (up to 100 Hz)

Digital Input

Channels: Up to 8, source/sink selectable

Sensor Type: NPN/PNP type

I/O Mode: DI or Event Counter (up to 900 Hz)

Dry Contact:

• Logic 0: short to GND

• Logic 1: open

Wet Contact: (For Source Type)

• Logic 0: 0 to 3 VDC

• Logic 1: 10 to 30 VDC (DI COM to DI)

Common Type: 4 points per COM

Isolation: 3K VDC or 2K Vrms

Counter/Frequency: 900 Hz, power off storage

Digital Filtering Time Interval: Software selectable

Over-voltage Protection: 36 VDC

Poweroff Counter Memory: 48 bytes

Digital Output

Channels: Up to 8, sink type, 36 VDC, 200 mA

I/O Mode: DO or Pulse Output (up to 100 Hz)

Pulse Wave Width/Frequency: 10 ms/100 Hz

Over-voltage Protection: 45 VDC

Over-current Limit: 600 mA

Over-temperature Shutdown: 160°C

Output Current Rating: Max. 200 mA per channel

Isolation: 3K VDC or 2K Vrms

Relay Output

Channels: 2 Form A (N.O.) relay outputs, 5 A

Contact Rating: 5 A @ 30 VDC, 5 A @ 240 VAC, 5 A @ 110 VAC

Inductance Load: 2 A

Resistance Load: 5 A

Breakdown Voltage: 500 VAC

Relay On/Off Time: 10 ms, 5 ms (max.)

Initial Insulation Resistance: 1G min. @ 500 VDC

Expected Life: 100,000 times (Typical)

Initial Contact Resistance: 30 milli-ohms (max.)

Pulse Output: 20 operation times per minutes at rated load

Isolation: 3K VDC or 2K Vrms

Power Requirements

Power Input: 24 VDC nominal, 12 to 36 VDC

Power Consumption:

- GPRS Always On (Communication): 4.2 W
- GPRS Off: 2.8 W

Physical Characteristics

Dimensions: 46.8 x 135 x 105 mm (1.84 x 5.31 x 4.13 in)

Weight: 495 g

Environmental Limits

Operating Temperature: -10 to 55°C (14 to 131°F)

Storage Temperature: -40 to 85°C (-40 to 185°F)

Ambient Relative Humidity: 5 to 95% (non-condensing)

Regulatory Approvals

EMI: FCC part 15, CISPR (EN55022) Class A

EMS:

IEC 61000-4-2 (ESD), level 2/3

IEC 61000-4-3 (RS), level 2

IEC 61000-4-4 (EFT), level 2

IEC 61000-4-5 (Surge), level 3

IEC 61000-4-6 (CS), level 2

IEC 61000-4-8 (PM), level 1

IEC 61000-4-11 (DIP)

IEC 61000-6-2 (ESD), level 2/3

IEC 61000-6-4 (EFT), level 2

Safety: UL 508 (Pending)

Shock: IEC 60068-2-27

Freefall: IEC 60068-2-32

Vibration: IEC 60068-2-6

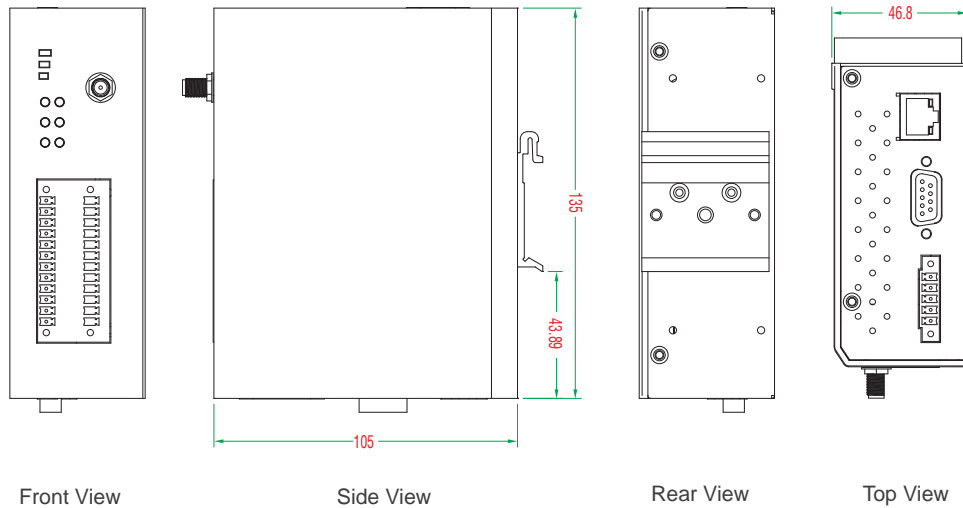
Note: Please check Moxa's website for the most up-to-date certification status.

Warranty

Warranty Period: 2 years

Details: See www.moxa.com/warranty

Dimensions (unit = mm)



Pin Assignment

I/O (left to right)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
AIO+	AIO-	AII+	AII-	DL_COM1	DIO0	DIO1	DIO2	DIO3	GND	RO_NO	RO_C	AI2+	AI2-	AI3+	AI3-	DL_COM2	DIO4	DIO5	DIO6	DIO7	GND	R1_NO	R1_C

Ordering Information

Available Models

ioLogik W5340: Active GPRS I/O with 4 AIs, 8 DIOs, and 2 relay outputs