ioLogik W5340

Active GPRS I/O with 4 AIs, 8 DIOs, 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
> SNMP Trap with I/O status
> 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

The certification logos shown here apply to some or all of the products in this section. For details, see "Regulatory Approvals" under "Specifications" below.

CE FC

: 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:
• ±0.1% FSR @ 25°C
• ±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

MOXA®

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

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

Shock: IEC 60068-2-27

Freefall: IEC 60068-2-32
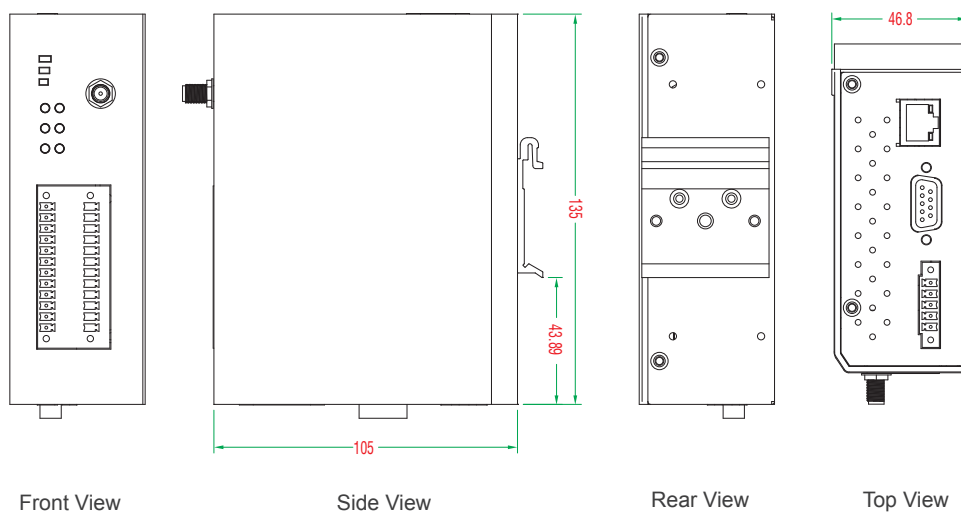
Vibration: IEC 60068-2-6

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)

Front View   Side View   Rear View   Top View

: 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
AI0+	AI0-	AI1+	AI1-	DI_COM1	DIO0	DIO1	DIO2	DIO3	GND	R0_NO	R1_NO	AI2+	AI2-	AI3+	AI3-	DI_COM2	DIO4	DIO5	DIO6	DIO7	GND	R0_C	R1_C

: Ordering Information

Available Models

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