



SERIAL NUMBER



ArgusON AMG 150

Wireless Monitoring System
Reference Manual
Part Number F7911501

Flash Technology, 332 Nichol Mill Lane, Franklin, TN 37067
(615) 261-2000

Front Matter

Abstract

This manual contains information and instructions for installing, operating and maintaining the ArgusON Wireless Monitoring System.

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Warranty

Flash Technology warrants all components, under normal operating conditions, for 2 years.

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Section 1 – Introduction

Introduction

The ArgusON Gateway 150 is an intelligent GSM/GPRS or CDMA device enabling a remote machine or monitored device to communicate via cellular networks and the internet. It provides data logging, alarm or event checking, configuration and communication.

Specifications

I/O

Digital

16 Dry Contact inputs.

Logic 0 = Open

Logic 1 = Close to GND

These inputs are used to detect relay or switch hard contacts.

8 digital inputs.

Logic 0 = Open

Logic 1 = Close to GND

These inputs are used to detect solid-state devices such as transistors, etc.

Inputs fully protected from -24 V to +36 V and can handle short spikes of +/- 40 V

6 Form C relay outputs. 5Amps 250VAC, 30VDC

2 High current outputs. +40 VDC, 2 Amps max per output sinking.

Analog

2 4-20mA inputs 11 bit resolution.

6 0-5vdc inputs 11 bit resolution.

Analog inputs: 1Mohm impedance, up to 4100 samples/sec

2 4-20mA outputs 12 bit resolution.

2 0-10vdc outputs 12 bit resolution.
Analog outputs: update rate of 12 kHz.

Protocol

Modbus/ RTU Master.

Monitors 10 Modbus inputs, 10 Modbus outputs and 88 Modbus registers.

Modbus communication via RS-485.

Other

On-board real time clock.

Battery back-up.

Input Voltage 120 VAC

Current .5 Amp

Operating Temp -40 to +70C

Features

- Service mode switch to disable alarms during setup and maintenance.
- Site power monitored input.
- Service Active LED to indicate communications established.
- Signal strength LED to indicate cellular signal strength.
- Interface to CDMA, GSM/GPRS modem.
- Data logging of all monitored inputs (including Modbus outputs) with programmable frequency.
- Send an event if on, off or on change for the inputs or Modbus inputs and outputs.
- Analog inputs and Modbus registers can send an event if above, below or outside the set point(s).
- Outputs can be fixed or momentary, be repeatable (time of day) and be controlled by an input.

- All inputs (digital and analog) have a configurable software filter or delay time (seconds) to eliminate problems with bouncing signals or contact closures. An input is not considered to have changed state or value until the time has expired.

Section 2 – Initial On-Site Wireless Service Check

Unpacking

Inspect shipping cartons for signs of damage before opening them. Check package contents against the packing list and inspect each item for visible damage. Report damage claims promptly to the freight handler.

Important

The following will verify wireless service in your area and must be performed at the location where the unit is to be installed.

Prior to installation, the on-site technician should apply 120 VAC to the unit and then monitor the green LED indicator labeled “ACTIVE” on PCB 9052 for illumination. See Figure 1-1 for location of LED. If wireless service is available, the LED will blink indicating that the unit has connected to the wireless network.

Upon successful completion, shut off power to the unit and proceed with installation.

Section 3 – Mounting and Installation

Mounting

Outline, mounting, and clearance dimensions for the controller are shown in Figure 2-1 and 2-2.

Use the following guidelines for mounting the gateway:

- Ensure that adequate space exists around the equipment for access during installation, maintenance and servicing.
- Allow space for air flow around the controller.

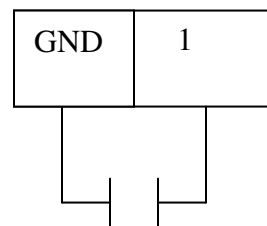
Connecting the Hardware

Follow all national and local electrical codes.

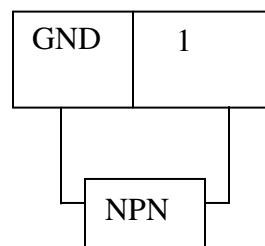
Connect 120 VAC to J1 as shown in Figure 1-1.

Connecting the I/O

Dry contacts J4



Digital Input J3



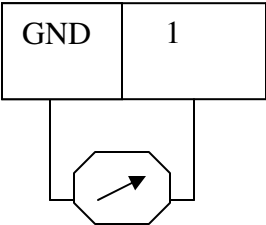
J3 inputs are meant to be used by solid-state or digital switches such as transistors.

Section 4 – Configuration

All digital inputs have a switching threshold of 1.40 V. Anything below this value is a logic 1 (ON) and anything above is a logic 0 (OFF). All the inputs are pulled high and therefore are OFF with nothing connected to them.

The ArgusON Gateway 150 is configured using a web interface via the cellular network. It is remotely configurable and does not require any software or computer on site. Currently, assistance from Flash Technology is required. Please contact Flash at 1-800-821-5825 for assistance.

Analog Inputs J6



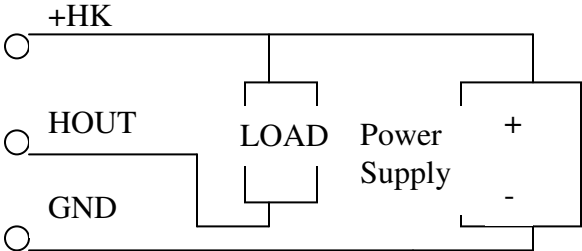
Analog inputs 1 and 2 are 4-20mA and inputs 3-8 are 0-5vdc. The input impedance is 1Mohm.

Analog Outputs J7

There are four outputs; two each provide 0-10Vdc and 4-20mA. For the voltage outputs the maximum output current is 10mA. For the 4-20mA outputs the maximum resistance that can be driven is 400 ohms. Loads are connected between IOUT1,2 or VOUT1,2 and GND.

Digital Outputs J8

There are two high-current outputs labeled HOUT1 and HOUT2. For each of these there are three pins, labeled HOUT, +HK and GND. These outputs can sink up to 2 amps and the connection is:



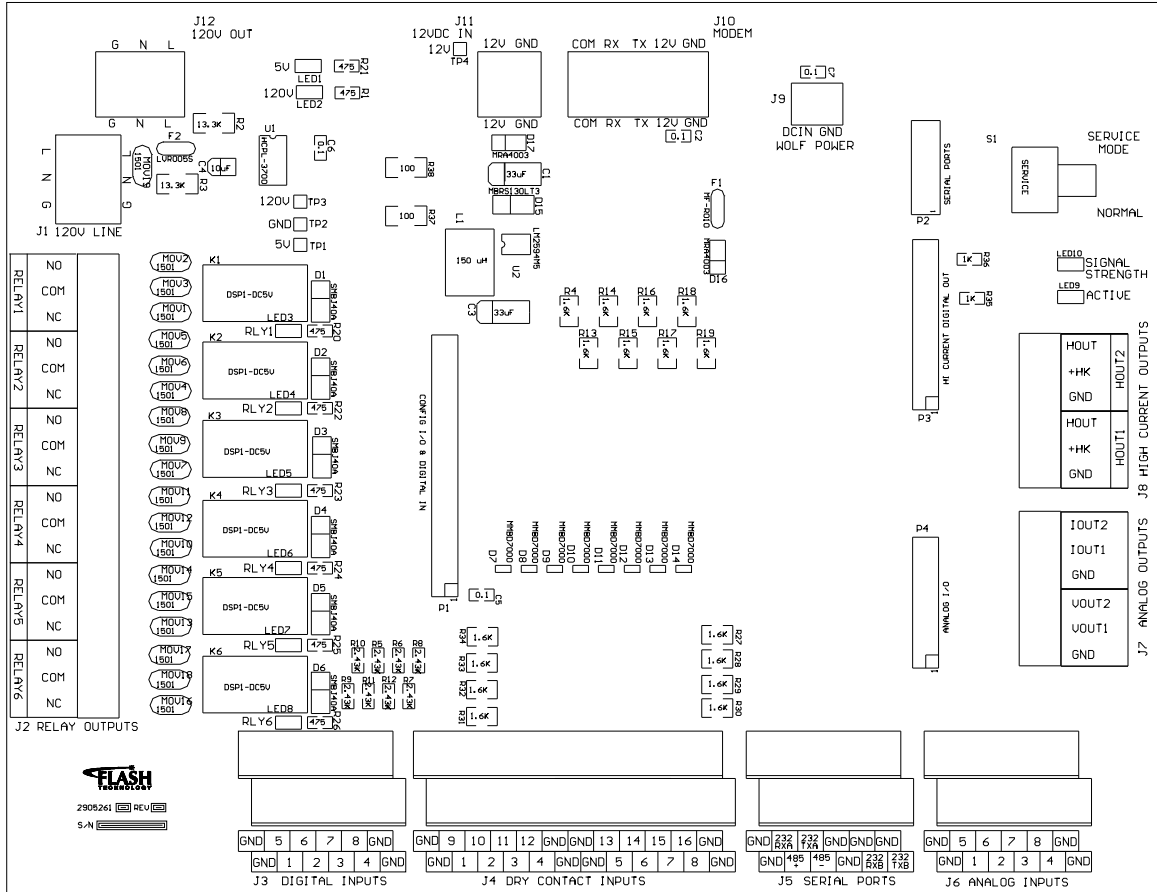
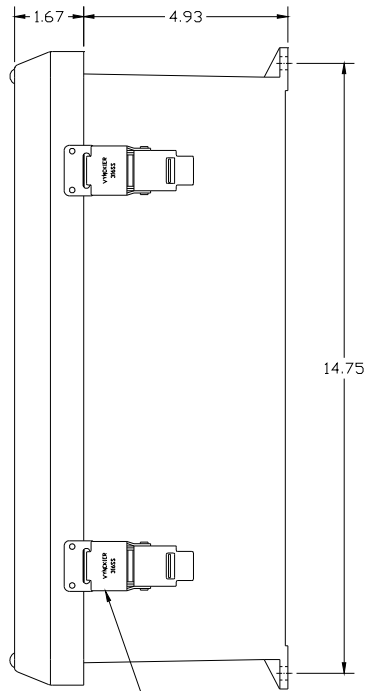


Figure 1-1 PCB 9052

RIGHT SIDE VIEW



FRONT VIEW—COVER REMOVED

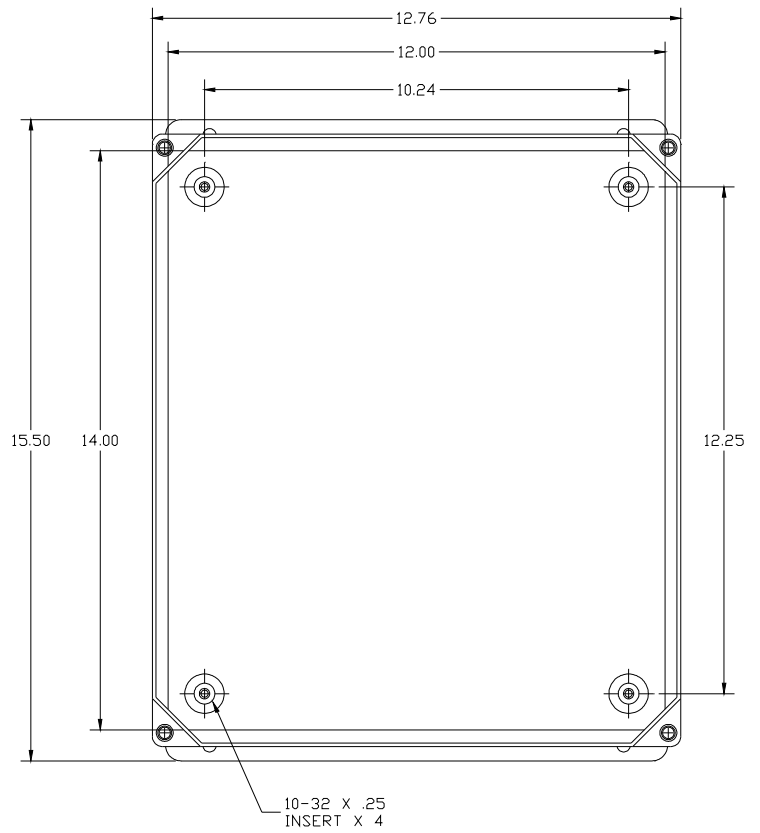


Figure 2-1 Enclosure Mounting and Outline

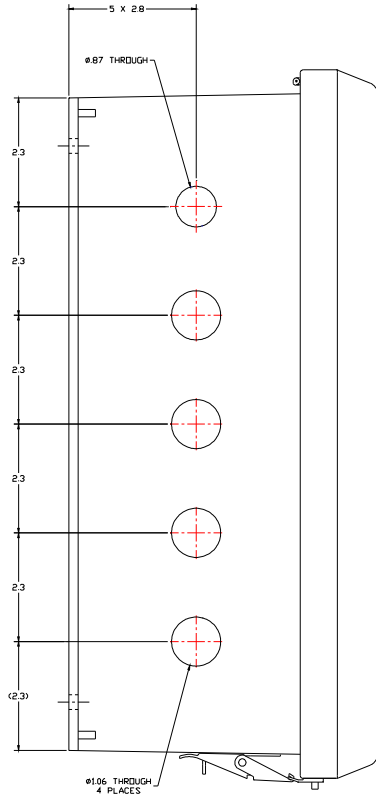


Figure 2-2 Enclosure Bottom view

Section 5 – Recommended Spare & Replaceable Parts

Customer Service

Customer Service: (800) 821-5825

Telephone: (615) 261-2000

Facsimile: (615) 261-2600

Shipping Address:

Flash Technology
332 Nichol Mill Lane
Franklin, TN 37067

Ordering Parts

To order spare or replacement parts, contact customer service at 1-800-821-5825.

Table 5-1 – Replacement Parts

Reference	Description	Part Number
MODEM	Wireless Modem (GSM)	5905201
MODEM	Wireless Modem (CDMA)	5905218
BATTERY	12V-1.2AH	4991875
ANTENNA	External with 12' (ft) cable (GSM/CDMA)	4905227/4905229
ANTENNA	Enclosure mounted (GSM/CDMA)	4905220/4905221
POWER SUPPLY	12VDC/24VDC	5905202

Returning Equipment – Return Material Authorization (RMA)

If a product purchased from Flash Technology must be returned for any reason, please follow the procedure below:

NOTE: An RMA number must be requested from Flash Technology prior to shipment of any product. No returned product will be processed without an RMA number. This number will be the only reference necessary for returning and getting information on the product's progress.

1. To initiate an RMA, customers should call the Alarm Response & Compliance Center at (800-821-5825) to receive technical assistance and a case number. The following information is required before a case number can be generated:
 - Site Name/Number / FCC Registration number/ Call Letters or Airport Designator
 - Site Owner (provide all that apply – owner, agent or subcontractor)
 - Contractor Name
 - Contractor Company
 - Point of Contact Information: Name, Phone Number, Email Address, Fax Number and Cell Phone (or alternate phone number)
 - Product's Serial Number
 - Product's Model Number or part number
 - Case Number (if previously given)
 - Reason for call, with a full description of the reported issue
2. The case number will then serve as a precursor to receiving an RMA number if it is determined that the product or equipment should be returned. To expedite the RMA process, please provide:
 - Return shipping method
 - Purchase Order (if non-warranty repair)
 - Shipping Address
 - Bill To Address
 - Any additional information to assist in resolving the issue or problem
3. A P.O. is required in advance for the replacement of product that may be under warranty. Flash will then, at its discretion issue a credit once the validity of the warranty has been determined.
4. A purchase order (P.O.) is also required in advance for all non-warranty repairs. NOTE: the purchase order is required prior to the issuance of the RMA number.
 - If the P.O. number is available at the time of the call, an RMA number will be issued and the customer must then fax or email the P.O. with the RMA number as the reference, to ensure prompt processing.

- If the P.O. number is NOT available at the time of the call, a Case Number will be given to the customer and should be referenced on the P.O. when faxed or emailed to RMA Rep.
 - Flash will then, at its discretion repair or replace the defective product and return the product to the customer based on the shipping method selected.
 - The customer may purchase a new product before sending in the existing product for repair. If Flash Technology determines the existing product is still covered under warranty a credit will be issued to the customer for the new product.
5. After receiving the Flash Technology RMA number, please adhere to the following packaging guidelines:
- All returned products should be packaged in a way to prevent damage in transit. Adequate packing should be provided taking into account the method of shipment.
Flash Technology will not be responsible for damaged items if product is not returned in appropriate packaging.
6. All packages should clearly display the RMA number on the outside of all RMA shipping containers. RMA products (exact items and quantity) should be returned to:
- Flash Technology
Attn: RMA #XXX
332 Nichol Mill Lane
Franklin, TN 37067
7. All RMA numbers:
- Are valid for 15 business days. Products received after may result in extra screening and delays.
 - Must have all required information provided before a RMA number to be assigned.

Return to Stock Policy

- Parts can be returned within 90 days of ship date and will be subject to a 20% restocking fee. Product must:
 - Be in the original packaging
 - Not be damaged
- After 90 days no parts can be returned