Algorithms

Field-Equipment

Monitor/Control Signals

(Input Terminals)

(Output Terminals)

Analog Filter

0/999 sec

1 'CD' CONFIGURE STPTS/CAL

ANALOG OUTPUT

4 / 20 MADC

2 ANALOG INPUTS STATUS DIGITAL STATE

RELAY OUTPUT

Relay 1
Relay 2

Analog Input

4/20mADC Through External 250 Ohm Resistor or any Input Specified on Module Tag

3 HOST TO POLL FOR STATUS/DATA

Digital Input

(Dry Contact)
D1 Status
D2 Status

4 REMOTE CONTROL OF DIGITAL OUTPUTS

5 D1 DIGITAL INPUT #1 STATUS

6 D2 DIGITAL INPUT #2 STATUS

RS232C

VOCABULARY LIST

AVERAGE ANALOG
DATA STORAGE
DOWN LOAD

Legend

(x) = Algorthim Number

( ) = Wiring Table Designations. Refer to Page 2 of WSD (Figure 2) drawing for physical layout/connection location.

● = Begin Algorithm

■ = End Algorithm

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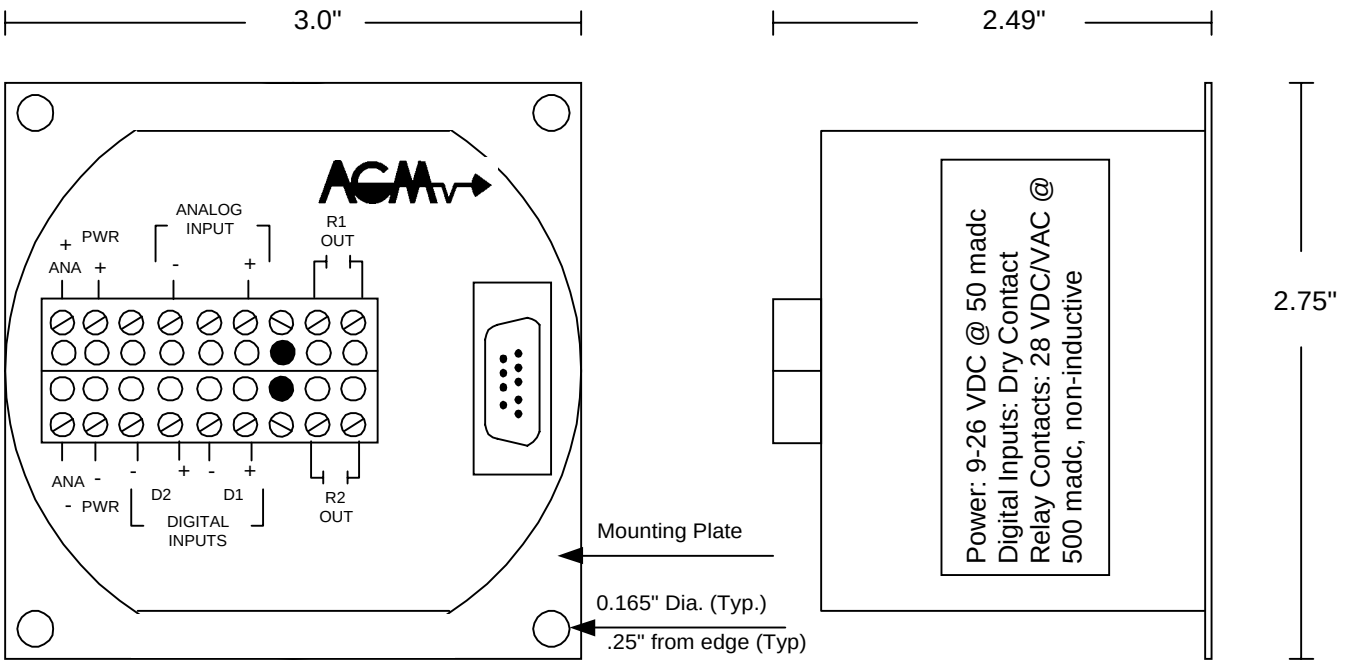
Tucson,Arizona

Knowledge Map

AGM
MODBUS

	Signature	Date	PRO-0000000-0000	Rev
Drawn By	JG	6/21/00	Ref MODBUS	NC
Checked By	RF	6/21/00	SO# XXX	Sheet 1 of 3
Cust Approval		__/__/__	XXXXX	



REFER TO WSD 30083-1

Data Handler Operations

The Data Handler (SPM 9000-D2N) is designed to filter and record an analog input and control two output relays. The analog input can be scaled in engineering units and recorded with a time date stamp, based on a setpoint inteval in seconds. The analog input is filtered based on a setpoint and recorded. The output relays can be controlled through a computer or through a modem using a terminal program. The digital inputs can be polled for status with the analog average value.

Active Commands

Command	Description	Results
$x VERS	**Data handler version**	**Display Version of Data Handler**
$x CD	**Configure Data**	**Enable Configure Routines**
$x DA	**Dump Data**	**Dumps to terminal historical data**
$x RD	**Read Data**	**Displays analog input**
$x CM	**Clear Memory**	**Erase all stored records**

	Signature	Date	PRO-0000000-0000	Rev
Drawn By	JG	6/21/00	Ref MODBUS	NC
Checked By	RF	6/21/00	SO# XXXX	Sheet
Cust Approval		__/__/__	LXXXXFP	2 of 3

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Front Panel Notes
AGM
MODBUS

To Access the super puk configuration, type ' SCADA" from the drive/directory installed with the software provided in this shipment. You can use any terminal program that supports serial ASCII communications and use the same active commands. The terminal program provided herewith contains help notes on the super puk configurations. This program defaults to serial port COM:1.

RTSdly: 10x20msec: This is used to set how long the RTS line will be on before charters start to be transmitted.

Date : MM/DD/YY : This message will display the current date as seen from the data handler. If different than the actual date then enter it as it is formatted above (i.e. MM/DD/YY, example 03/13/90). Then hit <CR> to store the data. If the current date is correct then you can just hit <CR> and the date will not be updated. If you make an error on data entry you may hit the backspace key to delete it.

Time : HH:MM:SS : This message will display the current time as seen from the data handler. If different than the actual time then enter it as it is formatted above (i.e. HH:MM:SS, example 01:30:00). Please note this is a 24 hour clock so midnight is 23:59:59. Hit <CR> to complete the step.

Config:-2: This entry is used to set addressing mode and specific RS232 line protocols.

Addr:1: If addressing is used, enter the units address. Valid addresses are integers between 0 and 255.

Baud:96: The puk can operate at 300, 1200 or 9600 baud. The default (-1) is 1200 baud and an entry of (0) is 300 baud and an entry of (96) is 9600 baud.

Input Avg (1sec): This is used to set the filter delay to average the input over the time period in seconds.

Communication Fail Delay (600sec): Enter the delay before communication fault output unless communication check variable is changed to a value other then zero.

Zero Input Raw (26.9063Hz): Set this value to the one obtained in step 4 of the AGM Modbus protocol instructions for setting the input configuration.

Full Input Raw (93.6584Hz): Set this value to the one obtained in step 7 of the AGM Modbus protocol instructions for setting the input configuration.

Zero Inp (0.0000): This value represents the zero scale engineering units of the analog input signal. For Modbus protocol this should be set to zero.

Ful Inp (4095.0000): This value represents the full scale engineering units of the analog input signal. For Modbus protocol this should be set to 4095.

<EOT>