SeeLevel II™

Tank Fluid Monitor

905-D6 WITS OPTION COMMUNICATION BOARD MANUAL

Printed in Canada

GARNET INSTRUMENTS LTD.

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905D6 WITS Manual_v4.0 - 16-Sep-2015

The 905D6 WITS communication option board uses industry standard Wellsite Information Transfer Specification (WITS) communications over RS232 or RS422 hardware interfaces. This protocol can be used to send volume and temperature data to a Pason system.

The RS422 connection can connect with the Pason RigComm connection using the Pason CBLASS399 cable to the Pason Doghouse, Sidekick, Connector Box on a TPC, or Network Panel on the newer VSP. The RS232 connection can connect to a Pason workstation or to a Pason Comm Box (COMM022) to connect to RigComm connections. The communication settings used are 9600 baud, 8 bits, 1 stop bit, and parity set to None.

The communications hardware interface must be configured for PA.232 or PA.422 communications in the 900D6 display and with the serial jumpers on the 905D6 WITS communication option board. In the 900D6 display enter the configuration menu using the 6 digit Master Code and configure the SERIAL CONFIGURATION MENU. Select either "**PA.422**" or "**PA.232**". The "**PA.422**" selection is used with RS422 communications and "**PA.232**" is used with RS232 communications. The two serial jumpers on the 905D6 WITS communication board must be moved to either the 422 or 232 positions. An additional termination jumper on the 905D6 WITS communication option board also needs to be set when using RS422.

To enable communications from the 900D6 display to the communication board the serial data transfer in the 900D6 display must be turned on through the configuration menus using the 6 digit security code menu. ("SERoL" set to "On")

External power (6-24 VDC) must be supplied to power the 905D6 WITS communication option board when using RS232 or RS422 communication.

The WITS record/item identification numbers are configured in the 900D6 display through the configuration menus using the 4 digit security code menu. Gauge ID Menus in the 900D6 sets the WITS record/item identification numbers for each gauge. Pason recommends Record 19 for custom WITS data. The following table shows the recommended settings for a 900D6 quad display.

GAU ID	Record/Item	Description
1901	1901	Volume1
	1902	Temperature1
1903	1903	Volume2
	1904	Temperature2
1905	1905	Volume3
	1906	Temperature3
1907	1907	Volume4
	1908	Temperature4

For single, dual, or triple 900D6 displays configure the number of Gauge IDs needed. The temperature will use the next WITS record/item when using Gauge IDs between 9-9999.

The following table shows the settings for a 900D6 interface gauge. The below and above interface volumes use the next WITS record/item after the temperature.

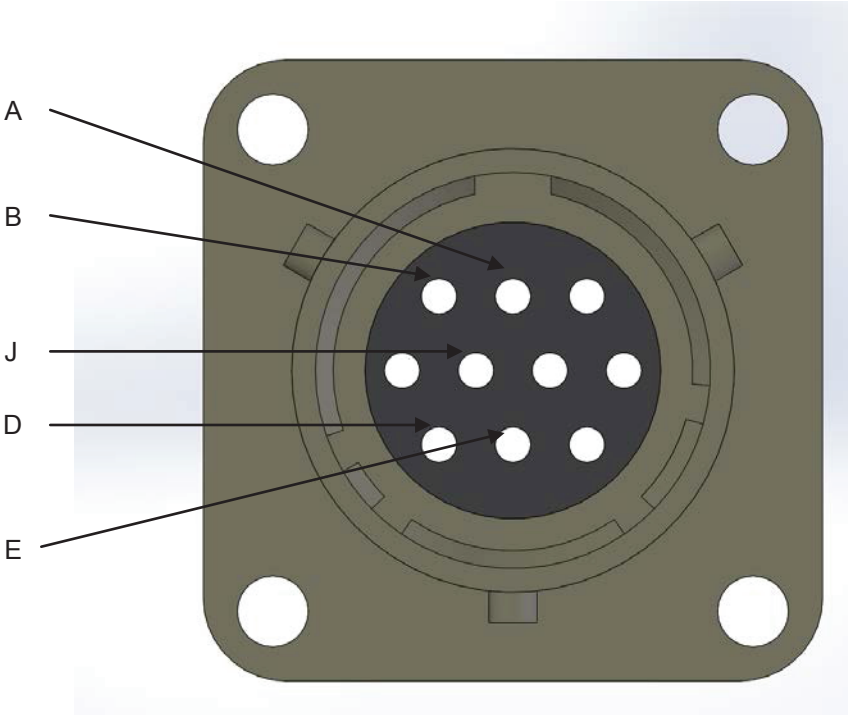
GAU ID	Record/Item	Description
1901	1901	Volume
	1902	Temperature
	1903	Below Volume
	1904	Above Volume

When not connecting to a Pason system, the WITS Pre-Defined Record Types can be used. Setting the Gauge Identifier's to 1-8 selects WITS Data Record 11: Mud Tank Volumes and puts the fluid temperature reading into the following WITS record/item numbers.

GAU ID	Record/Item	Description
1	1115	Volume1
	1135	Temperature1
2	1116	Volume2
	1136	Temperature2
3	1117	Volume3
	1137	Temperature3
4	1118	Volume4
	1138	Temperature4
5	1119	Volume5
	1139	Temperature5
6	1120	Volume6
	1140	Temperature6
7	1121	Volume7
	1141	Temperature7
8	1122	Volume8
	1142	Temperature8

The WITS Pre-Defined Record Types cannot be used with a Pason system, since Pason has these record/item numbers reserved for their own sensors.

The RS422 port uses a female Amphenol PT00E-12-10S receptacle which accepts an Amphenol PT06E12-10P male plug.



The table below lists pins and descriptions for the RS422 port pin-out.

PIN	TERMINAL	Color	Description
A	RS422 TX POS	Blue	TX+
B	RS422 TX NEG	White/Blue	TX-
D	RS422 RX POS	Yellow	RX+
E	RS422 RX NEG	White/Yellow	RX-
J	RADIO GND	Black	GND
all other pins			unused