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Product:	MultiSmart	References:	
Author:			
Distribution:	Internal/External		

Topic Description:
Configuration of MultiSmart unit for Modbus over a serial connection

Observations/Symptoms:
The most important settings are the link type, the channel and the channel settings. For serial communications RTU or ASCII can be used. The channel must be channel 1 for direct serial connection which is the serial 2 port on the MultiSmart. If a radio is used set the channel to channel 2 which is serial port 3. Before getting started make sure that Modbus is enabled in the software modules of the unit.

Recommendations/Solutions:

1. Ensure Modbus is enabled: (Settings -> More -> More -> Software Modules -> Enable/Disable Modules) "Modbus Slave" must be in the "Enabled Modules" list.

2. Ensure the Modbus Slave is Active: (Settings -> Advanced -> ModbusSlave -> Slave -> Slave 01 -> Session -> Slave Active) must be "checked".

3. The serial port is Channel 1: (Settings -> Advanced -> ModbusSlave -> Slave -> Slave 01 -> Session -> Comms Channel) must be "1".

4. Ensure the port is set for 8 data bits: (Settings -> Advanced -> Telemetry -> Channel -> Channel 01-> RS 232 Channel -> Number of data bits).

5. Ensure the number of stop bits is 1: (Settings -> Advanced -> Telemetry -> Channel -> Channel 01-> RS 232 Channel -> Number of stop bits).

6. Note the baud rate: (Settings -> Advanced -> Telemetry -> Channel -> Channel 01-> RS 232 Channel -> Baud Rate) 4800 Baud recommended.

7. Note the Slave address of the MultiSmart, default is 1: (Settings -> Advanced -> ModbusSlave -> Slave -> Slave 01 -> Session -> Slave Address)

5. Note the Modbus Link Type (transmission mode): (Settings -> Advanced -> ModbusSlave -> Slave -> Slave 01 -> Link -> Link Type) RTU.

6. Ensure the DNP3 Slave is not on the same channel: The Serial port is Channel 1: (Settings -> Advanced -> DNPSlave -> Slave -> Slave 01 -> Session -> Comms Channel) must NOT be "1".

7. If you are not using DNP3 make sure the DNP slave is disabled: (Settings -> Advanced -> DNPSlave -> Slave -> Slave 01 -> Session -> Slave Active) must be "unchecked".

8. MultiSmart Modbus register addresses are available for viewing and export to a csv file from the Modbus screen: (Settings -> More -> Communications -> Modus)