



Making Data Acquisition Easy

CAGE/NCAGE Code: 3FNFO

### Modbus RTU to Modbus TCP Conversion

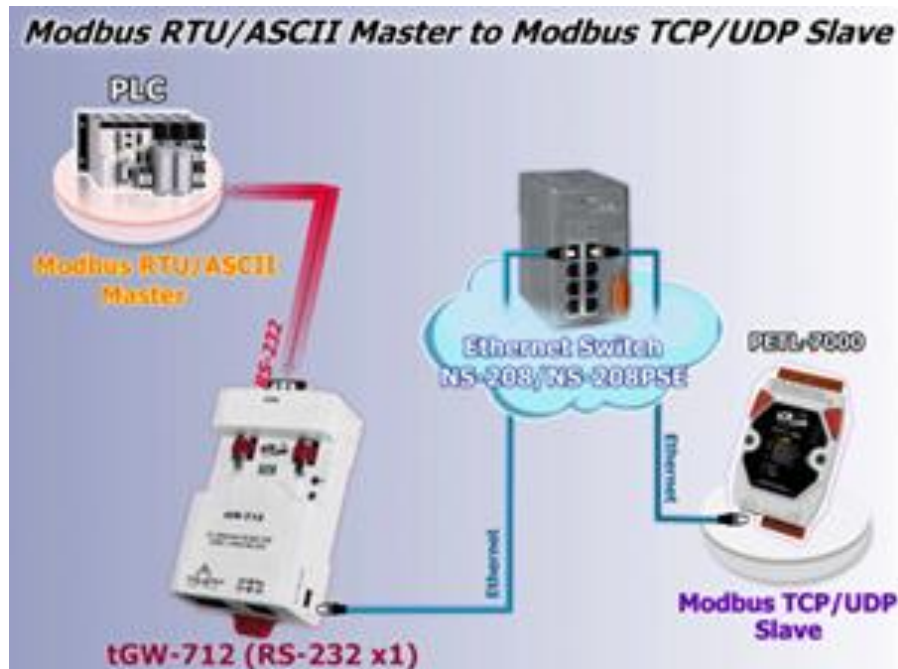
Modbus was developed by Modicon in 1979. Because Modbus is open source and royalty free, it quickly became the standard for sharing information between devices in the Industrial marketplace. It was predicated on serial communication using serial RS-485 or RS-232. The system contains a single Modbus RTU master device which sends command requests to one or more Modbus RTU slave devices which have unique addresses and communicate using the same baud rate and parity options. In a Modbus system, only the slave device which the command is addressed to, will respond to the command using a predefined serial response which the master device will receive and decode.

Because Modbus RTU is serial based and only allows for a single master device, it is considered slow and inefficient for large systems.

Modbus TCP has many similarities with Modbus RTU since it was based upon it. The key difference is that Modbus TCP utilizes Ethernet communication between devices. This makes it much faster and more easily expandable in most situations.

Since the 2 protocols are so similar, one would think that they can easily coexist in the same system. This is somewhat true.

An industrial gateway can be used to convert Modbus RTU commands into Modbus TCP commands and convert from serial communication to Ethernet communication.

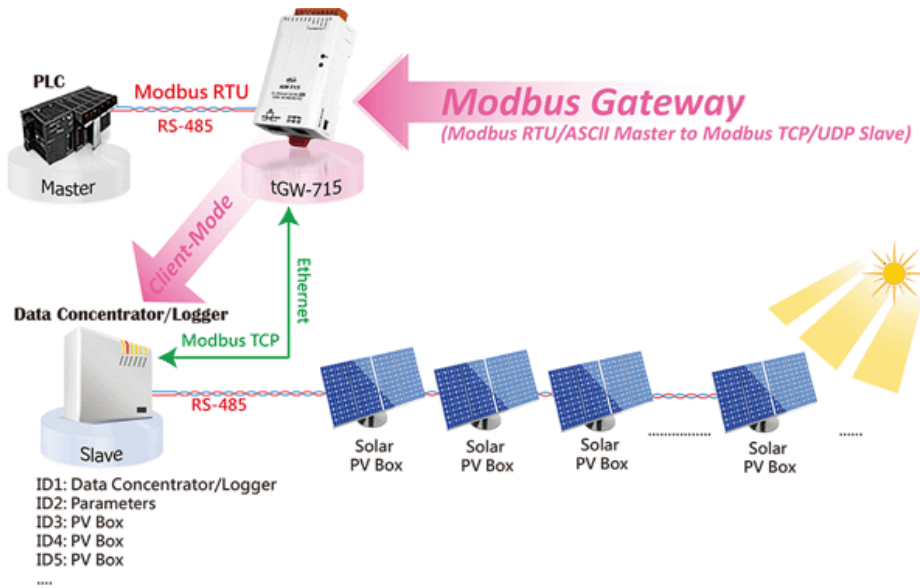




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The TGW series of gateways are capable of both Modbus RTU to Modbus TCP conversion but also Modbus TCP to Modbus RTU conversion depending on which communication type the master device communicates.



We offer models with various combinations of RS-232 and RS-485 ports.

tGW-700 Series							
Model (Non-Isolated)	Model (Isolated)	RS-232	RS-422/485	RS-485	COM1	COM2	COM3
tGW-712	tGW-712i	1	-	-	3-wire RS-232	-	-
tGW-722	tGW-722i	2	-	-	3-wire RS-232	3-wire RS-232	-
tGW-732	tGW-732i	3	-	-	3-wire RS-232	3-wire RS-232	3-wire RS-232
tGW-715	tGW-715i	-	1	-	2-wire RS-485 4-wire RS-422	-	-
tGW-725	tGW-725i	-	-	2	2-wire RS-485	2-wire RS-485	-
tGW-735	tGW-735i	-	-	3	2-wire RS-485	2-wire RS-485	2-wire RS-485
tGW-718	tGW-718i	1		-	3-wire RS-232 2-wire RS-485 4-wire RS-422	-	-
tGW-724	tGW-724i	1	-	1	2-wire RS-485	3-wire RS-232	-
tGW-734	tGW-734i	2	-	1	2-wire RS-485	3-wire RS-232	3-wire RS-232



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If you have any questions, please feel free to contact us to discuss any applications you may have.