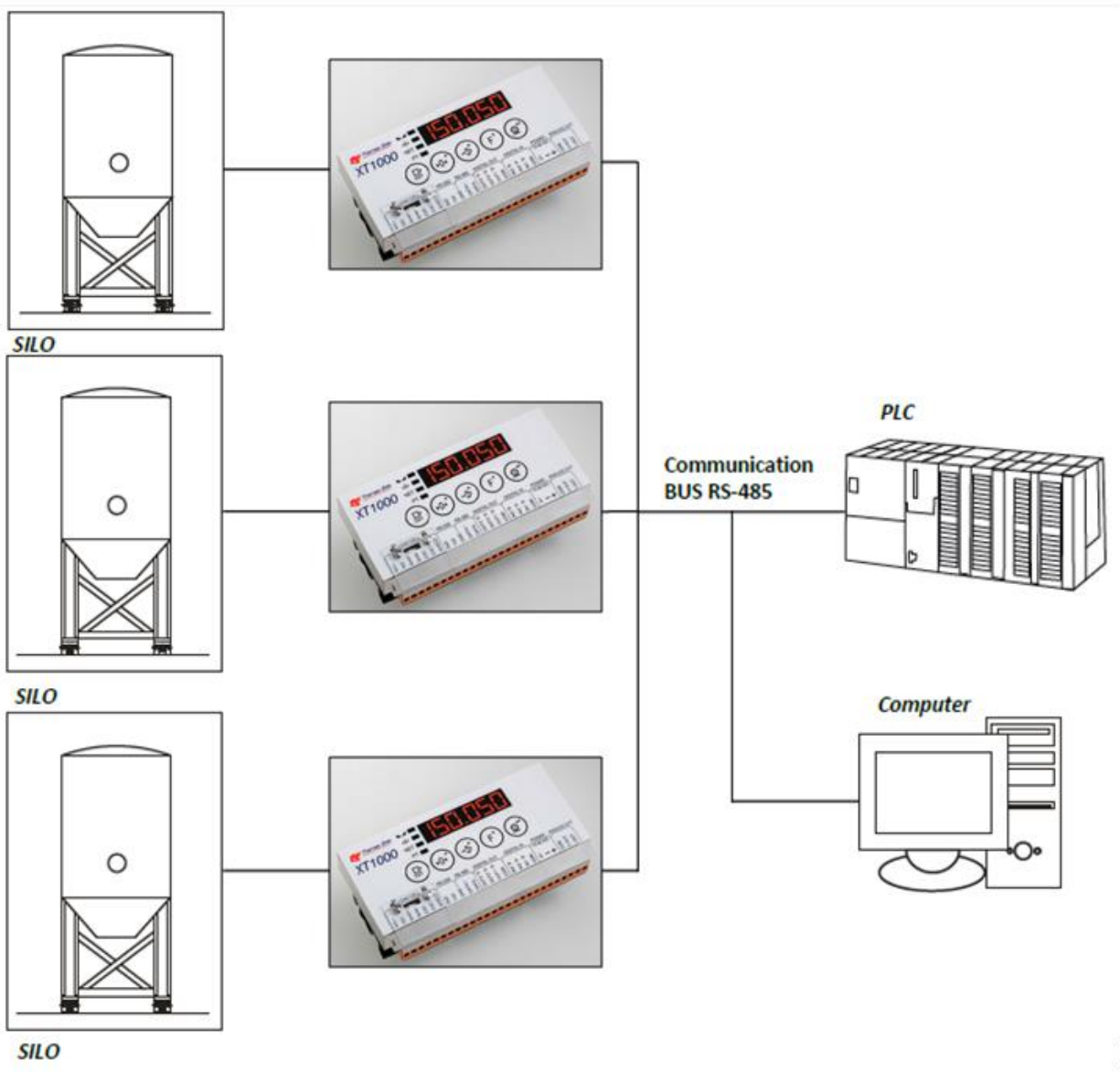
USE OF MULTIPLE SMART OR XT1000 INSTRUMENTS CONNECTED TOGETHER IN A BUS NETWORK

The intent of this technical note is to provide a brief explanation on how to connect several SMART or XT1000 instruments together in an RS485 BUS network, connected to a PC or PLC system.

The SMART-IP65 indicator (MULTI-2 version) and XT1000 instrument each house an RS-485 (MODBUS RTU/ASCII) communication serial port, which allows the connection of several devices to a PC or PLC in the same Data Bus without the necessity for large, complicated communication networks to be created.

Typical Schematic Diagram



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USE OF MULTIPLE SMART OR XT1000 INSTRUMENTS CONNECTED TOGETHER IN A BUS NETWORK continued

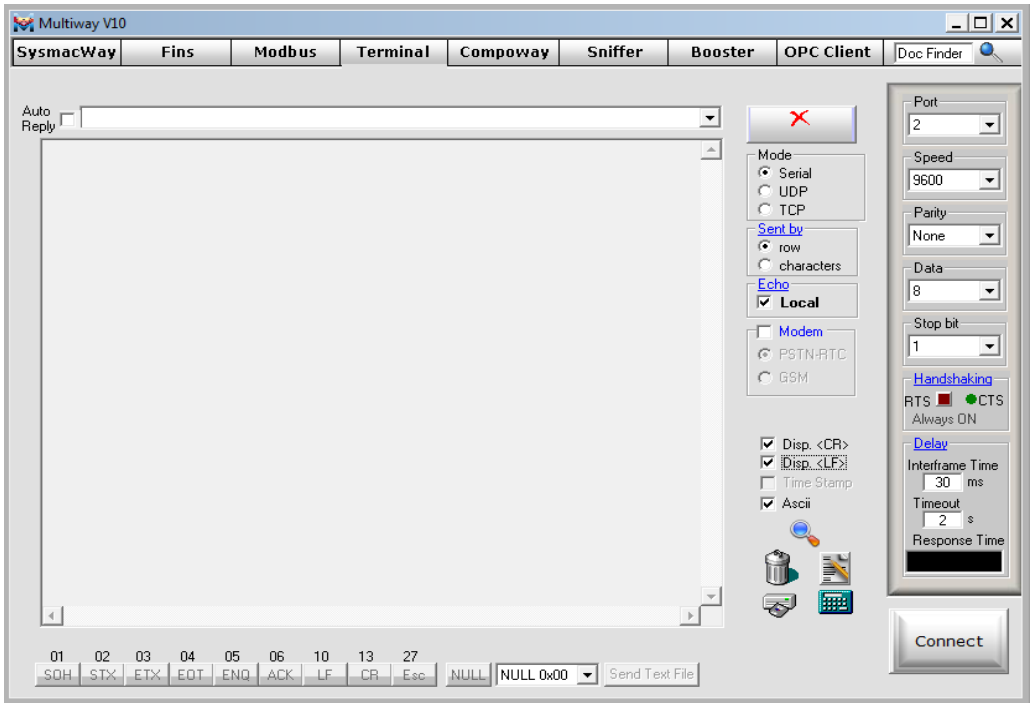
Equipment Required

- RS485 serial bus
- Multiple SMART or XT1000 instruments
- RS485 connection cables
- Software for sending/receiving commands to the SMART or XT1000 instruments, to obtain information on the weight or indicator status for each silo or vessel

Software for sending/receiving commands

A suitable, freely available software package is Omron MultiWay software. This can be configured as a "Terminal" connection to the RS485 bus. Each device in the bus is given a unique address identifier, as described in the SMART or XT1000 manuals; please refer to the section entitled "Network Communications (RS-485)".

Ensure that the parameters for the MultiWay software "Terminal" are configured the same as in the SMART or XT1000 instruments, as described in the instrument manual under "Communication Port (Rx/Tx)". The picture below shows a typical "Terminal" configuration setup in MultiWay.



For further assistance on this subject from Thames Side, please contact us by telephone on +44 (0) 118 941 1387 or at www.thames-side.com