

SPECIAL INSTRUCTIONS

SERIAL OUTPUT

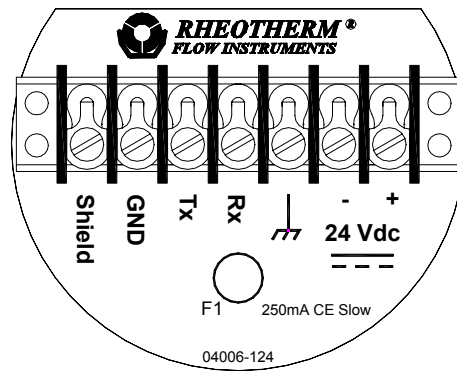
This Rheotherm instrument has an RS-232 output. There is a data stream that can be accessed from the back side of the flow instrument housing

If a distance of greater than twenty-five feet is needed for the serial communications, a RS-422 converter is recommended.

Tx(Transmit) is the data stream coming out of the instrument.

Rx(Receive) is for data going into the instrument. Note: This should only be hooked up if you are using the UIS.

GND is the Tx & Rx signal return terminal and should be connected. It is not chassis or earth grounded.



Custom software may be developed by the user to receive and archive Model 210 data into a computer system. The electronics has a serial data protocol of 14400 baud, no parity check, eight data bits and one stop bit (i.e., 14400,N,8,1). Each transmitted group of data is sent in a standard ASCII coded format representing flow rate, flow direction, and temperature.

The data stream consists of three fields, separated by comma characters and terminated with a carriage return <Enter> byte (ASCII code 13). E.g. xxx.xx, yyy.yy, zzz.zz <Enter> where xxx.xx is 0-100% of full scale flow, yyy.yy is temperature in degrees F, and zzz.zz is total flow. The total number of bytes transmitted in each data stream could be as high as 25 bytes including the trailing <Enter>. This data group is sent about once every second. The field names and number of bytes in one data stream are shown below.

Flow Rate (%)	Comma	Temp. (°F)	Comma	Totalizer	Term. (CR)
up to 6 Bytes	1 Byte	up to 6 Bytes	1 Byte	up to 10 Bytes	1 Byte