

The FlowCom register is offered in two model families – the FC100 and the FC101. The FC100 is the register is used in conjunction with the McPropeller™ line of propeller meters, and the FC101 is used in conjunction with the Water Specialties™ line of propeller meters.



McPropeller Flow Meter



Water Specialties Flow Meter

The FlowCom register is offered by McCrometer as factory-installed register on new flow meters, or as a retrofit kit for meters that are already installed in the field.

External Power and the Internal Backup Battery

The FlowCom register contains an integral 5-year battery. However, for EtherMeter applications, it is recommended that the FlowCom be configured for external power supply, as this will permit the user to interrogate the register at a high sampling rate without adversely affecting the battery life.

External power is supplied via the FlowCom's 4-20mA flow rate loop cable. Because the FlowCom register only updates its available encoder reading every 600 seconds, this signal is effectively useless for calculating rate-of-flow. Therefore, if rate-of-flow information is desired, then the 4-20mA loop must be read separately.

Due to the fact that the 4-20mA output of the FlowCom is not isolated, the 4-20mA loop cannot be interfaced directly to one of the EtherMeter's analog input channels without the addition of an isolation buffer module.

Although apparently not documented by McCrometer in the FlowCom User Manual, it has been reported by our customers that the FlowCom 4-20mA loop requires +24VDC power from a separate, dedicated isolated 24VDC power supply.

Ordering Information

For retrofit applications, the following information should be provided to the McCrometer factory or your local McCrometer sales representative:

McPropeller Meter Serial Number / Model Number

FC100-02-K + Sensus Protocol Output

...or...

Water Specialties Meter Serial Number / Model Number

FC101-02-K + Sensus Protocol Output

Signal, Power, and Meter Wiring

The FlowCom register kit contains three (3) integral cables: Meter Connection, Power Connection, and Absolute Encoder Connection.

Magnetic Pickup. The Meter Connection cable contains two inner conductors (Red,Black) which are connected to the propeller's magnetic pickup in accordance with factory instructions.

Power Supply. The Power Connection cable contains a Red inner conductor which should be connected to a separate, dedicated isolated DC Power Supply (+) and the Black inner conductor should be connected to the DC Power Supply Common (-). The DC Power Supply must be within the range of 12-30VDC. The Power Connection cable also contains a Silver Shield conductor, and this should be connected to Earth/Chassis ground. **For EtherMeter Version 256 and earlier, it is important to note that the FlowCom 4-20mA loop and the EtherMeter cannot be powered from the same power supply! However, for EtherMeter Version 257 and later, the same 24Vdc Power Supply can be used to power the EtherMeter and the FlowCom 4-20mA loop.**

Absolute Encoder. The Absolute Encoder Cable contains three (3) inner conductors, which should be connected to the EtherMeter. For EtherMeter channel 1, the connections are: Terminal.14-Red, Terminal.15-Green, Terminal.16-Black. For EtherMeter channel 2, the connections are: Terminal.17-Red, Terminal.18-Green, Terminal.19-Black.

Additional Grounding. Additionally, the metal body of the FlowCom register should be bonded to Earth/Chassis ground using a ring terminal or grounding lug.

For more information, please contact SCADAmetrics or McCrometer technical support.