



## Flow Meter Order Form Instructions

The attached order form is designed to provide ONICON with all of the information required to process your order and build your meter(s). Please provide information where appropriate. Please do not hesitate to contact ONICON for assistance, if necessary.

### Ordering Information

**Company Name:**

Enter the name of your company, including the city and state where you are located.

**Contact Name:**

Enter the name of the key contact person responsible for this order. This is the person we will contact if we have questions. We will also send order confirmations to this person.

**Purchase Order #:**

Enter the purchase order for this order.

**Project Name:**

Enter the name associated with this project. ONICON will record this name with the order. This will allow us to easily locate your order, without knowing the purchase order number.

**Specified By:**

Enter the name of the engineering firm, if there is one, and the city and state where they are located. Please include a telephone number, if available.

**Requested Delivery Date:**

Enter the delivery date required for this meter. ONICON will do everything possible to accommodate your schedule. Please keep in mind however that each item is build to order.

**Ship Meters Via:**

Select the preferred UPS shipping method.

**Ship installation kits in advance?**

ONICON insertion style flow meters are typically ordered with installation hardware kits. These kits may be shipped in advance of the meters. This will allow the mechanical contractor to complete, fill, flush and pressure test the piping, prior to the installation of the meters.

**Ship Kits Via:**

Select the preferred UPS shipping method.

### Application Information

**FLOW METER MODEL:**

Enter the ONICON model number for item(s) you are ordering.

**METER TAG INFORMATION:**

ONICON will label the meter with your designation for this meter. This could be an address in a control system or an abbreviated description of the application such as, "Sec. CHW Flow".

**APPLICATION TYPE:**

Enter a brief description of the basic application where the flow meter will be used. Typical applications include: Chilled water (CHW), Hot water (HW), Condenser water (CW), Make up water, Boiler feed etc.

**LIQUID TYPE:**

Enter the liquid type flowing in the pipe. If it is a mixture of water and something else, indicate the approximate percentage of and type of additive. This information is critical for flow meters connected to BTU meters.

**PIPE SIZE:**

Enter the nominal pipe size in inches or millimeters. Please signify millimeters by using "MM" after the number.

**PIPE MATERIAL:**

Enter the material the pipe is made from such as: copper, black iron (carbon steel), PVC, etc.

**PIPE SCHEDULE, TYPE, or I.D.:**

Enter the standard pipe schedule or type (i.e. schedule 40, 80 or Std. for carbon steel or type L or K for copper, etc.) for the pipe where the flow meter will be installed. The pipe schedule determines the I.D. for any given pipe O.D. by identifying the pipe wall thickness. This information is critical to the accurate calibration of the flow meter. For non-standard pipe, enter an I.D.

**MAX. OPERATING TEMPERATURE: (For hot water only)**

Enter the maximum operating temperature for the liquid where the flow meter will be installed. Any application where the temperature exceeds 250° F will require a flow meter with 316 stainless steel wetted parts. ONICON flow meters have a maximum operating temperature of 300° F.



## ORDER FORM INSTRUCTIONS , Continued

### **TYPICAL FLOW RATE:**

Enter the flow rate that you expect to see flowing through this pipe under normal load conditions. Examples of this would be the manufacturers recommended flow rate through a chiller, 67% of the maximum flow rating through an air handler fed from a modulating valve or 67% of the maximum pump output driving a secondary loop when the pumps are controlled by VFD's.

### **DESIGN MAXIMUM FLOW RATE:**

Enter the maximum expected flow rate for the pipe where the meter will be installed. Examples of this would be the maximum rating on the pump supplying this pipe or the total output from all chillers feeding a primary header.

### **ANALOG OUTPUT RANGE:**

Enter the flow rate to be used as the full scale value for the analog output. This value should be well above (Typically 125% of maximum.) the design maximum flow rate to prevent the possibility of accidentally over ranging the input of the control system.

### **ANALOG OUTPUT: (For analog output models only.)**

Select the analog output type you will use with this meter. You may choose 4 – 20 mA, 0 – 10 volts or 0 – 5 volts. **Please note that if you choose the 0 – 5 volt output, the 4 – 20 mA output will be disabled.**

### **MAXIMUM OUTPUT FREQUENCY: (For Frequency, Divided or Scaled Output models.)**

Enter the maximum pulse frequency that can be applied to the input to your control system or data acquisition device.

### **SCALE FACTOR: (For Scaled Output models only.)**

Enter the scale factor for the contact closure pulse. Pulses may be scaled to one, ten or one hundred gallons per pulse.

## **AVAILABLE OPTIONS**

### **Installation Hardware:**

Enter the installation kit catalog number or the letter(s) that corresponds to the correct choice of installation kit.

Enter "A" if you wish to order an installation kit appropriate for use with a pipe that has no water in it. Enter "B" if you wish to order an installation kit for use with pipes that are filled and under pressure.

"A" or "B" if you need stainless steel installation hardware. Enter "D" if you do not need an installation kit.

**Please note that you must enter a stack height if you do not order an installation kit. The length of the hardware stack the meter will be installed through is used by ONICON to determine the correct overall stem length for the meter.** To determine the correct stack height measure from the surface of the pipe to the top of the fitting where the flow meter will be attached. Please make certain you measure from the surface of the pipe and not the insulation.

### **Wetted Metal Components**

Select either nickel plated brass or 316 stainless steel for the wetted portion of the flow meter. 316 stainless steel is required for all meters operating at over 250° F or for any meter installed in PVC or stainless steel pipe. It is also required for meters used in boiler feed water applications and any application where the water may be chemically aggressive.

### **Signal Connections**

Select either standard cable without a terminating connector or plenum rated cable with a DIN connector.

### **Conduit Option**

All weathertight flow meters are equipped with a conduit connector. Enter yes if you want the flow meter to be supplied with a ten foot length of liquid tight flexible conduit with connectors.

### **Additional Signal Cable**

Enter "Std" if all you need is the standard ten foot unterminated cable. Enter the length in feet of the additional cable required. Cable lengths of 25, 50 or 100 feet may be purchased.

### **Electronics Enclosure**

Enter "Std" to select the weathertight enclosure. This enclosure is suitable for outdoor use, but cannot be submerged. Enter submersible if the flow meter will be installed below grade in a pit that may see short term flooding.

### **Optional Display Module**

Enter the model number of the display module you wish to order with this meter.