SMARTFLOW® TRACER®VM BLUETOOTH INTERFACE



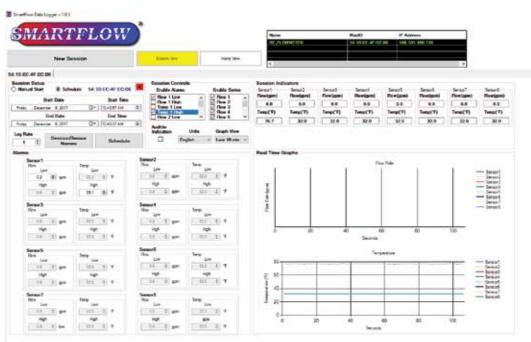


Step into the 21st century with the TRACERvm Bluetooth interface. Operators are able to view real time cooling data via Bluetooth compatible devices.

Tracer_{VM} Bluetooth Interface collects, transmits and saves data from Tracer_{VM} Base flowmeters installed in injection mold cooling circuits. Flowmeters purchased separately are connected via cable to the Tracer_{VM} Bluetooth Interface. The Interface provides power to each flowmeter and receives voltage signals for temperature and flow. The Bluetooth Interface wirelessly transmits flow and temperature to display on a mobile device. Flow condition data log files can be created via app and saved on USB flash drive documenting the mold cooling water conditions. The Interface also communicates over Ethernet connection to PC software for network file storage and alerts. The files are easily read into the data logger software for reference or analysis. Scientific Molders can



use this data to confirm processing parameters and optimize cycle times and cooling water efficiency.



Data Logger Software

(PC based for network file storage and alarm capabilities)



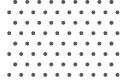




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 $\mathsf{Tracer}_{\mathsf{VM}}$ Bluetooth Interface includes the Interface module and all software necessary to create cooling line log files.

Mobile app allows for creation of log files to be saved on Interface connected USB. The Ethernet port on the Interface connects to local network enabling log file creation, storage and process alerts.

Peripheral equipment such as PC, Mobile Device or flash drives are user provided. Input comes from $Tracer_{vm}$ Base models.

Please refer to $Smartflow_{_{VM}}$ base model data sheet for details.

Features and Benefits

- Transmits temperature and flow conditions in real time to mobile devices for process monitoring up to 20 meters away.
- Simplifies multiple Tracer_{vm} Base installations by providing power, ground and signal termination near the process.
- Gasketed, water-resistant plastic enclosure provides secure mounting in locations where occasional water spray is present.
- Housing mounting holes are integral for easy installation.
- Ethernet port connects the Interface to a local network for communication with Data Logger software.
- USB port provides mobile device charging plus flash drive connection.
- Smartflow Data Logger PC software included.

Specifications:

NEMA4X compliant
0°C to 52°C (32°F to 125°F)
20 meters (65.5 ft)
3 meters (10ft)
8 to 28VDC with earth ground (external)
9 pieces liquid-tight (included)
included



TracerVM Base

Mobile App

 $\mathsf{Tracer}_{\mathsf{VM}}$ Mobile app is available for free download from iTunes or the Google Play store. Search for "Tracer $_{\mathsf{VM}}$ ". The mobile app displays temperature and flow rate data from one Interface module with up to 8 flowmeters at one time.

Functions:

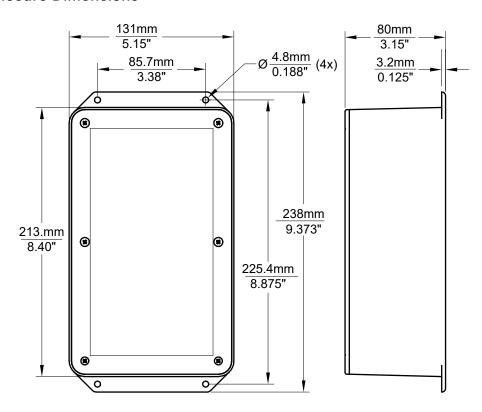
- Saves .csv file to USB data storage device connected to the Bluetooth Interface Module for archiving and analysis.
- · Display and data logging options include:
 - * Name Interfaces
 - * Name individual cooling circuits on the device
 - * Name .csv file
 - * Manual or Scheduled duration
 - * Selectable log rate between 1 and 3600 seconds
 - * Metric or English units







VMBTI-100 Enclosure Dimensions

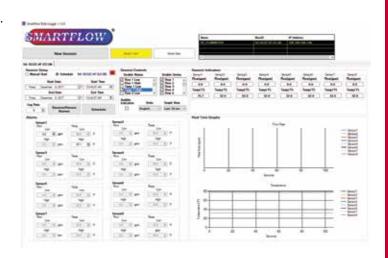


Data Logger (PC Based Software)

The Data Logger Software is provided to you free of charge as an internet download. The Data Logger displays temperature and flow rate data from up to 10 Tracer $_{\text{VM}}$ Interface Modules with each module on a separate tab.

Functions:

- Dry Contact Switch for Alarm Notification
- Saves .csv file to specified location for archiving and analysis.
- Display and data logging options include:
 - * Name Interfaces
 - Name individual cooling circuits in the session (display only)
 - * Name .csv file
 - * Manual or Scheduled duration
 - * Selectable log rate between 1 and 3600 seconds
 - * Metric or English units
 - * Set alerts for low or high temperature and flow rates
 - * View real-time graph for each Tracer_{VM} Base unit. View data from each Tracer_{VM} Interface module in individual tabs.







PC-Based **SmartFlow Data Logger Software** provides temperature and flow process data that can be used in database software for reference and analysis. These data records are useful to injection molders maintaining compliance to regulatory requirements and quality control.

Two screen views are available: Home View and Session View.

Home View

The Home View displays graphs of temperature and flow cooling water conditions for all Tracer $_{\rm VM}$ Base flowmeters connected to Tracer $_{\rm VM}$ Bluetooth Interfaces. Up to 10 Interfaces can be displayed graphically on one screen. The maximum number of Tracer $_{\rm VM}$ Bluetooth Interface Units visible for selection is 30. The Home View can show overall health of cooling water lines across the shop floor. An unexpected value for flow or temperature can be seen quickly and may be an indication of a blocked cooling line or out-of-tolerance processing conditions resulting in poor molded part quality.

Session View

Session view displays one Tracer $_{\rm VM}$ Bluetooth Interface with temperature and flow values for each connected Tracer $_{\rm VM}$ Base flowmeter. A maximum of eight flowmeters can be viewed on the screen in Session View. A maximum of 10 Interfaces can be accessed as tabs in the session view at one time.

Log files are created in Session View. These can be started manually or scheduled as needed. Maximum recorded log length is 72 hours.

Session Controls box allow users to set alerts for low or high temperature and flow conditions. When data is being recorded, an alert will pop up on screen to notify the user when a parameter has been breached. The indicator will disappear as soon as the condition that caused the alert has cleared. Alerts are disabled when recording is not active.

Session Indicators at the top of the screen display current temperature and flow values from $\mathsf{Tracer}_{\mathsf{VM}}$ Base Flowmeters that are connected to the selected Interface. Real Time Graphs are also displayed for each flowmeter connected to the Interface. Unused flowmeter locations may be disabled as needed. Active Interface units are selected via tabs located near the top of the screen





Home View

Session View