Thermal Performance Testing and Monitoring



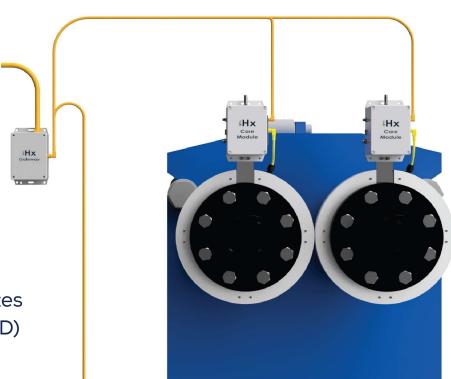
Cloud Enabled | Easy to Install Hardware | Flexible Configuration

The Hx System is a versatile solution of sensors & electronics that offers remote & real-time process monitoring and diagnostics for heat exchangers.

- Real-time data dashboard (Edge or Cloud)
- Flexible connectivity (Wired or Wireless)
- LAN, WiFi, Bluetooth & RS485 ready
- Power using DC line or Battery
- Flexible connectivity with plant sensors such as flowmeters
- May be optioned with an additional flowmeter
- Wafer flange design eliminates process downtime during probe removal

Measurable Parameters

% Change in Relative Performances | Heat Transfer Rates Thermal Efficiencies | Log Mean Temp. Difference (LMTD) Fouling Factors (flowrate data required)



Temperature Plate Assembly



Hx Gateway

- Wired via RS485 or Wireless via Bluetooth
- Powered via DC line or Battery
- Wireless and Battery powered enable process monitoring/diagonistics in remote locations

Hx 1704 Temp. Plate

- Customizable wafer flange design for effortless install
- Removable covers for easy access to temp. sensors
- Enclosed sensors ensure protection from harsh environments
- Non-intrusive probe housing eliminates process downtime during probe removal

Hx 1707 Temperature Sensors

- High accuracy sensor
- Stainless steel construction





Typical Wired Configuration



RS485 BUS **Hx Gateway** Collects sensor data via RS485 Transmits to plant network via LAN RS485 BUS • LAN, WiFi Bluetooth & RS485 ready **Hx-Core Module** Powered by DC • Transmits data via RS485 Flexible connectivity w/ other plant sensors ie. digital/analog flowmeter

Plate & Frame Heat Exchanger

Typical Wireless Configuration



Hx Gateway

- Collects sensor data & transmits to plant networks
- Highly configurable w/ wired or wireless connectivity

· LAN, WiFi, Bluetooth & RS485 enabled



ie. digital/analog flowmeter

Tube & Shell Heat Exchanger

