

# Application Note

## FLIR GW66 OPC UA Host Utility

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# **Application Note FLIR GW66 OPC UA Host Utility**



# 1 OPC UA Host Utility

## 1.1 FEATURES

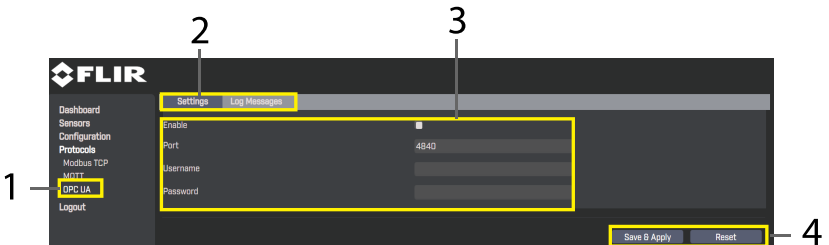
- For use with the FLIR GW66 Gateway
- Username and password protected
- Up to ten (10) vibration sensors can be monitored
- Logs up to 2 million data points
- Initialization time: 75 to 85 seconds

## 1.2 Customer Support

Customer Support Telephone List	<a href="https://support.flir.com/contact">https://support.flir.com/contact</a>
Repair, Calibration, and Technical Support	<a href="https://support.flir.com">https://support.flir.com</a>

## 1.3 USER INTERFACE

The GW66 user interface is available using most web-browsers. The OPC UA settings window is shown below. For information about the web browser user interface, see the SV88/89–KIT user manual, available from the FLIR support site.

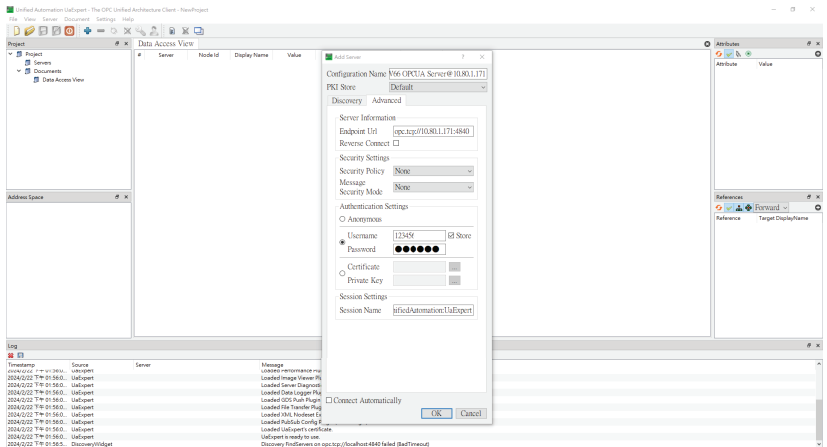


1. Click Protocol > OPC UA in the GW66 web browser user interface to open this page.
2. Click **Settings** (click **Log Messages** to view the automated message log).
3. Click the **Enable** box and then set the port number and host username and password.
4. Click **Save & Apply** to save your changes or click **Reset** to abort.



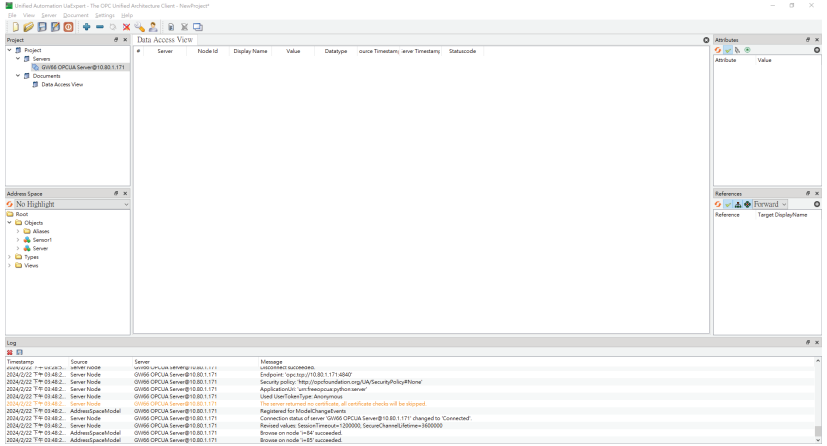
## 1.5 Set Username and Password

Set username and password, per the screen shot below.



## 1.6 Connect to OPC UA Server

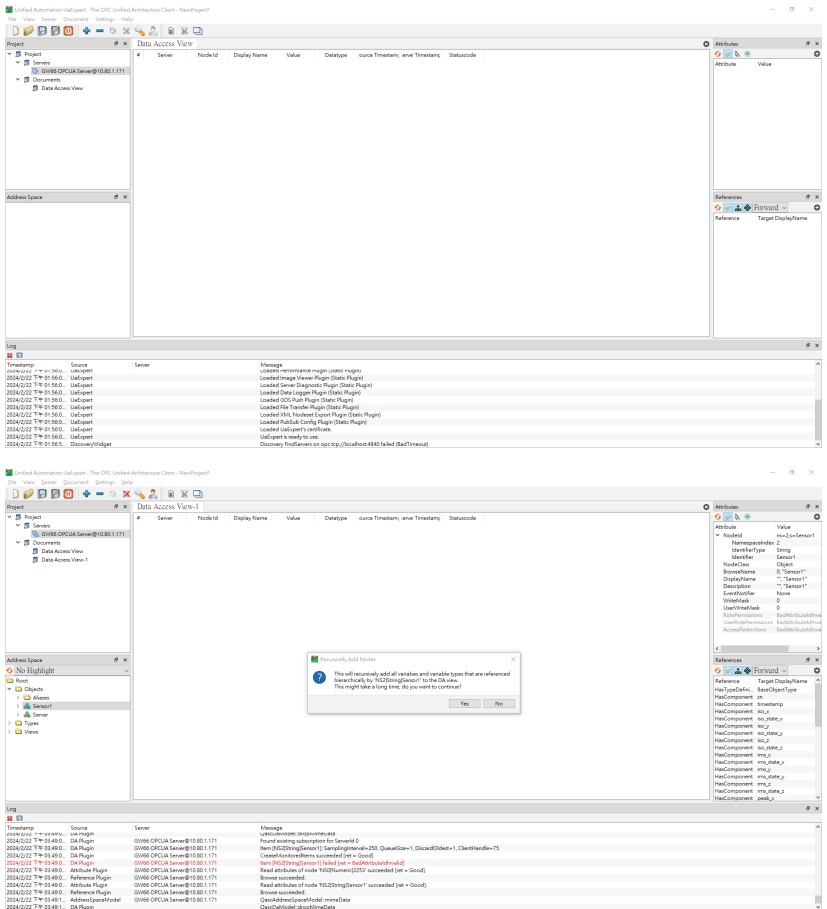
Connect to OPC UA Server by clicking the Connect Service icon, per the screen shot below.

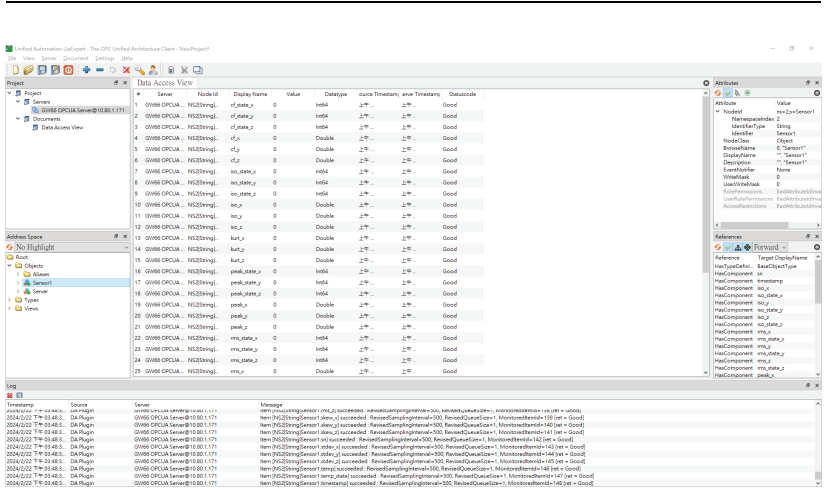




## 1.7 Add Sensor Data to the Data Access View

Add Sensor Data to the Data Access View, per the screen shots below.





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## 1.8 OPC UA PROTOCOL

Node Id	Display Name	Data Type
Sensor1.cf_state_x	cf_state_x	Int64
Sensor1.cf_state_y	cf_state_y	Int64
Sensor1.cf_state_z	.cf_state_z	Int64
Sensor1.cf_x	cf_x	Double
Sensor1.cf_y	cf_y	Double
Sensor1.cf_z	cf_z	Double
Sensor1.iso_state_x	iso_state_x	Int64
Sensor1.iso_state_y	so_state_y	Int64
Sensor1.iso_state_z	iso_state_z	Int64
Sensor1.iso_x	iso_x	Double
Sensor1.iso_y	iso_y	Double
Sensor1.iso_z	iso_z	Double
Sensor1.kurt_x	kurt_x	Double
Sensor1.kurt_y	kurt_y	Double
Sensor1.kurt_z	kurt_z	Double
Sensor1.peak_state_x	peak_state_x	Int64
Sensor1.peak_state_y	peak_state_y	Int64
Sensor1.peak_state_z	peak_state_z	Int64
Sensor1.peak_x	peak_x	Double
Sensor1.peak_y	peak_y	Double
Sensor1.peak_z	peak_z	Double
Sensor1.timestamp	timestamp	Int64
Sensor1.rms_state_x	rms_state_x	Int64
Sensor1.rms_state_y	rms_state_y	Int64
Sensor1.rms_state_z	rms_state_z	Int64
Sensor1.rms_x	rms_x	Double
Sensor1.rms_y	rms_y	Double
Sensor1.rms_z	rms_z	Double

Sensor1.skew_x	skew_x	Double
Sensor1.skew_y	skew_y	Double
Sensor1.skew_z	skew_z	Double
Sensor1.sn	sn	String
Sensor1.stdev_x	stdev_x	Double
Sensor1.stdev_y	stdev_y	Double
Sensor1.stdev_z	stdev_z	Double
Sensor1.temp	temp	Double
Sensor1.temp_state	emp_state	Int64
Sensor2.cf_state_x	cf_state_x	Int64
Sensor2.cf_state_y	cf_state_y	Int64
Sensor2.cf_state_z	.cf_state_z	Int64
Sensor2.cf_x	cf_x	Double
Sensor2.cf_y	cf_y	Double
Sensor2.cf_z	cf_z	Double
Sensor2.iso_state_x	iso_state_x	Int64
Sensor2.iso_state_y	so_state_y	Int64
Sensor2.iso_state_z	iso_state_z	Int64
Sensor2.iso_x	iso_x	Double
Sensor2.iso_y	iso_y	Double
Sensor2.iso_z	iso_z	Double
Sensor2.kurt_x	kurt_x	Double
Sensor2.kurt_y	kurt_y	Double
Sensor2.kurt_z	kurt_z	Double
Sensor2.peak_state_x	peak_state_x	Int64
Sensor2.peak_state_y	peak_state_y	Int64
Sensor2.peak_state_z	peak_state_z	Int64
Sensor2.peak_x	peak_x	Double
Sensor2.peak_y	peak_y	Double
Sensor2.peak_z	peak_z	Double

Sensor2.timestamp	timestamp	Int64
Sensor2.rms_state_x	rms_state_x	Int64
Sensor2.rms_state_y	rms_state_y	Int64
Sensor2.rms_state_z	rms_state_z	Int64
Sensor2.rms_x	rms_x	Double
Sensor2.rms_y	rms_y	Double
Sensor2.rms_z	rms_z	Double
Sensor2.skew_x	skew_x	Double
Sensor2.skew_y	skew_y	Double
Sensor2.skew_z	skew_z	Double
Sensor2.sn	sn	String
Sensor2.stdev_x	stdev_x	Double
Sensor2.stdev_y	stdev_y	Double
Sensor2.stdev_z	stdev_z	Double
Sensor2.temp	temp	Double
Sensor2.temp_state	emp_state	Int64
Sensor3.cf_state_x	cf_state_x	Int64
Sensor3.cf_state_y	cf_state_y	Int64
Sensor3.cf_state_z	.cf_state_z	Int64
Sensor3.cf_x	cf_x	Double
Sensor3.cf_y	cf_y	Double
Sensor3.cf_z	cf_z	Double
Sensor3.iso_state_x	iso_state_x	Int64
Sensor3.iso_state_y	so_state_y	Int64
Sensor3.iso_state_z	iso_state_z	Int64
Sensor3.iso_x	iso_x	Double
Sensor3.iso_y	iso_y	Double
Sensor3.iso_z	iso_z	Double
Sensor3.kurt_x	kurt_x	Double
Sensor3.kurt_y	kurt_y	Double

Sensor3.kurt_z	kurt_z	Double
Sensor3.peak_state_x	peak_state_x	Int64
Sensor3.peak_state_y	peak_state_y	Int64
Sensor3.peak_state_z	peak_state_z	Int64
Sensor3.peak_x	peak_x	Double
Sensor3.peak_y	peak_y	Double
Sensor3.peak_z	peak_z	Double
Sensor3.timestamp	timestamp	Int64
Sensor3.rms_state_x	rms_state_x	Int64
Sensor3.rms_state_y	rms_state_y	Int64
Sensor3.rms_state_z	rms_state_z	Int64
Sensor3.rms_x	rms_x	Double
Sensor3.rms_y	rms_y	Double
Sensor3.rms_z	rms_z	Double
Sensor3.skew_x	skew_x	Double
Sensor3.skew_y	skew_y	Double
Sensor3.skew_z	skew_z	Double
Sensor3.sn	sn	String
Sensor3.stdev_x	stdev_x	Double
Sensor3.stdev_y	stdev_y	Double
Sensor3.stdev_z	stdev_z	Double
Sensor3.temp	temp	Double
Sensor3.temp_state	emp_state	Int64
Sensor4.cf_state_x	cf_state_x	Int64
Sensor4.cf_state_y	cf_state_y	Int64
Sensor4.cf_state_z	.cf_state_z	Int64
Sensor4.cf_x	cf_x	Double
Sensor4.cf_y	cf_y	Double
Sensor4.cf_z	cf_z	Double
Sensor4.iso_state_x	iso_state_x	Int64

Sensor4.iso_state_y	so_state_y	Int64
Sensor4.iso_state_z	iso_state_z	Int64
Sensor4.iso_x	iso_x	Double
Sensor4.iso_y	iso_y	Double
Sensor4.iso_z	iso_z	Double
Sensor4.kurt_x	kurt_x	Double
Sensor4.kurt_y	kurt_y	Double
Sensor4.kurt_z	kurt_z	Double
Sensor4.peak_state_x	peak_state_x	Int64
Sensor4.peak_state_y	peak_state_y	Int64
Sensor4.peak_state_z	peak_state_z	Int64
Sensor4.peak_x	peak_x	Double
Sensor4.peak_y	peak_y	Double
Sensor4.peak_z	peak_z	Double
Sensor4.timestamp	timestamp	Int64
Sensor4.rms_state_x	rms_state_x	Int64
Sensor4.rms_state_y	rms_state_y	Int64
Sensor4.rms_state_z	rms_state_z	Int64
Sensor4.rms_x	rms_x	Double
Sensor4.rms_y	rms_y	Double
Sensor4.rms_z	rms_z	Double
Sensor4.skew_x	skew_x	Double
Sensor4.skew_y	skew_y	Double
Sensor4.skew_z	skew_z	Double
Sensor4.sn	sn	String
Sensor4.stdev_x	stdev_x	Double
Sensor4.stdev_y	stdev_y	Double
Sensor4.stdev_z	stdev_z	Double
Sensor4.temp	temp	Double
Sensor4.temp_state	emp_state	Int64

Sensor5.cf_state_x	cf_state_x	Int64
Sensor5.cf_state_y	cf_state_y	Int64
Sensor5.cf_state_z	.cf_state_z	Int64
Sensor5.cf_x	cf_x	Double
Sensor5.cf_y	cf_y	Double
Sensor5.cf_z	cf_z	Double
Sensor5.iso_state_x	iso_state_x	Int64
Sensor5.iso_state_y	so_state_y	Int64
Sensor5.iso_state_z	iso_state_z	Int64
Sensor5.iso_x	iso_x	Double
Sensor5.iso_y	iso_y	Double
Sensor5.iso_z	iso_z	Double
Sensor5.kurt_x	kurt_x	Double
Sensor5.kurt_y	kurt_y	Double
Sensor5.kurt_z	kurt_z	Double
Sensor5.peak_state_x	peak_state_x	Int64
Sensor5.peak_state_y	peak_state_y	Int64
Sensor5.peak_state_z	peak_state_z	Int64
Sensor5.peak_x	peak_x	Double
Sensor5.peak_y	peak_y	Double
Sensor5.peak_z	peak_z	Double
Sensor5.timestamp	timestamp	Int64
Sensor5.rms_state_x	rms_state_x	Int64
Sensor5.rms_state_y	rms_state_y	Int64
Sensor5.rms_state_z	rms_state_z	Int64
Sensor5.rms_x	rms_x	Double
Sensor5.rms_y	rms_y	Double
Sensor5.rms_z	rms_z	Double
Sensor5.skew_x	skew_x	Double
Sensor5.skew_y	skew_y	Double



Sensor5.skew_z	skew_z	Double
Sensor5.sn	sn	String
Sensor5.stdev_x	stdev_x	Double
Sensor5.stdev_y	stdev_y	Double
Sensor5.stdev_z	stdev_z	Double
Sensor5.temp	temp	Double
Sensor5.temp_state	emp_state	Int64
Sensor6.cf_state_x	cf_state_x	Int64
Sensor6.cf_state_y	cf_state_y	Int64
Sensor6.cf_state_z	.cf_state_z	Int64
Sensor6.cf_x	cf_x	Double
Sensor6.cf_y	cf_y	Double
Sensor6.cf_z	cf_z	Double
Sensor6.iso_state_x	iso_state_x	Int64
Sensor6.iso_state_y	so_state_y	Int64
Sensor6.iso_state_z	iso_state_z	Int64
Sensor6.iso_x	iso_x	Double
Sensor6.iso_y	iso_y	Double
Sensor6.iso_z	iso_z	Double
Sensor6.kurt_x	kurt_x	Double
Sensor6.kurt_y	kurt_y	Double
Sensor6.kurt_z	kurt_z	Double
Sensor6.peak_state_x	peak_state_x	Int64
Sensor6.peak_state_y	peak_state_y	Int64
Sensor6.peak_state_z	peak_state_z	Int64
Sensor6.peak_x	peak_x	Double
Sensor6.peak_y	peak_y	Double
Sensor6.peak_z	peak_z	Double
Sensor6.timestamp	timestamp	Int64
Sensor6.rms_state_x	rms_state_x	Int64

Sensor6.rms_state_y	rms_state_y	Int64
Sensor6.rms_state_z	rms_state_z	Int64
Sensor6.rms_x	rms_x	Double
Sensor6.rms_y	rms_y	Double
Sensor6.rms_z	rms_z	Double
Sensor6.skew_x	skew_x	Double
Sensor6.skew_y	skew_y	Double
Sensor6.skew_z	skew_z	Double
Sensor6.sn	sn	String
Sensor6.stdev_x	stdev_x	Double
Sensor6.stdev_y	stdev_y	Double
Sensor6.stdev_z	stdev_z	Double
Sensor6.temp	temp	Double
Sensor6.temp_state	emp_state	Int64
Sensor7.cf_state_x	cf_state_x	Int64
Sensor7.cf_state_y	cf_state_y	Int64
Sensor7.cf_state_z	.cf_state_z	Int64
Sensor7.cf_x	cf_x	Double
Sensor7.cf_y	cf_y	Double
Sensor7.cf_z	cf_z	Double
Sensor7.iso_state_x	iso_state_x	Int64
Sensor7.iso_state_y	so_state_y	Int64
Sensor7.iso_state_z	iso_state_z	Int64
Sensor7.iso_x	iso_x	Double
Sensor7.iso_y	iso_y	Double
Sensor7.iso_z	iso_z	Double
Sensor7.kurt_x	kurt_x	Double
Sensor7.kurt_y	kurt_y	Double
Sensor7.kurt_z	kurt_z	Double
Sensor7.peak_state_x	peak_state_x	Int64

Sensor7.peak_state_y	peak_state_y	Int64
Sensor7.peak_state_z	peak_state_z	Int64
Sensor7.peak_x	peak_x	Double
Sensor7.peak_y	peak_y	Double
Sensor7.peak_z	peak_z	Double
Sensor7.timestamp	timestamp	Int64
Sensor7.rms_state_x	rms_state_x	Int64
Sensor7.rms_state_y	rms_state_y	Int64
Sensor7.rms_state_z	rms_state_z	Int64
Sensor7.rms_x	rms_x	Double
Sensor7.rms_y	rms_y	Double
Sensor7.rms_z	rms_z	Double
Sensor7.skew_x	skew_x	Double
Sensor7.skew_y	skew_y	Double
Sensor7.skew_z	skew_z	Double
Sensor7.sn	sn	String
Sensor7.stdev_x	stdev_x	Double
Sensor7.stdev_y	stdev_y	Double
Sensor7.stdev_z	stdev_z	Double
Sensor7.temp	temp	Double
Sensor7.temp_state	emp_state	Int64
Sensor8.cf_state_x	cf_state_x	Int64
Sensor8.cf_state_y	cf_state_y	Int64
Sensor8.cf_state_z	.cf_state_z	Int64
Sensor8.cf_x	cf_x	Double
Sensor8.cf_y	cf_y	Double
Sensor8.cf_z	cf_z	Double
Sensor8.iso_state_x	iso_state_x	Int64
Sensor8.iso_state_y	so_state_y	Int64
Sensor8.iso_state_z	iso_state_z	Int64

Sensor8.iso_x	iso_x	Double
Sensor8.iso_y	iso_y	Double
Sensor8.iso_z	iso_z	Double
Sensor8.kurt_x	kurt_x	Double
Sensor8.kurt_y	kurt_y	Double
Sensor8.kurt_z	kurt_z	Double
Sensor8.peak_state_x	peak_state_x	Int64
Sensor8.peak_state_y	peak_state_y	Int64
Sensor8.peak_state_z	peak_state_z	Int64
Sensor8.peak_x	peak_x	Double
Sensor8.peak_y	peak_y	Double
Sensor8.peak_z	peak_z	Double
Sensor8.timestamp	timestamp	Int64
Sensor8.rms_state_x	rms_state_x	Int64
Sensor8.rms_state_y	rms_state_y	Int64
Sensor8.rms_state_z	rms_state_z	Int64
Sensor8.rms_x	rms_x	Double
Sensor8.rms_y	rms_y	Double
Sensor8.rms_z	rms_z	Double
Sensor8.skew_x	skew_x	Double
Sensor8.skew_y	skew_y	Double
Sensor8.skew_z	skew_z	Double
Sensor8.sn	sn	String
Sensor8.stdev_x	stdev_x	Double
Sensor8.stdev_y	stdev_y	Double
Sensor8.stdev_z	stdev_z	Double
Sensor8.temp	temp	Double
Sensor8.temp_state	emp_state	Int64
Sensor9.cf_state_x	cf_state_x	Int64
Sensor9.cf_state_y	cf_state_y	Int64

Sensor9.cf_state_z	.cf_state_z	Int64
Sensor9.cf_x	cf_x	Double
Sensor9.cf_y	cf_y	Double
Sensor9.cf_z	cf_z	Double
Sensor9.iso_state_x	iso_state_x	Int64
Sensor9.iso_state_y	so_state_y	Int64
Sensor9.iso_state_z	iso_state_z	Int64
Sensor9.iso_x	iso_x	Double
Sensor9.iso_y	iso_y	Double
Sensor9.iso_z	iso_z	Double
Sensor9.kurt_x	kurt_x	Double
Sensor9.kurt_y	kurt_y	Double
Sensor9.kurt_z	kurt_z	Double
Sensor9.peak_state_x	peak_state_x	Int64
Sensor9.peak_state_y	peak_state_y	Int64
Sensor9.peak_state_z	peak_state_z	Int64
Sensor9.peak_x	peak_x	Double
Sensor9.peak_y	peak_y	Double
Sensor9.peak_z	peak_z	Double
Sensor9.timestamp	timestamp	Int64
Sensor9.rms_state_x	rms_state_x	Int64
Sensor9.rms_state_y	rms_state_y	Int64
Sensor9.rms_state_z	rms_state_z	Int64
Sensor9.rms_x	rms_x	Double
Sensor9.rms_y	rms_y	Double
Sensor9.rms_z	rms_z	Double
Sensor9.skew_x	skew_x	Double
Sensor9.skew_y	skew_y	Double
Sensor9.skew_z	skew_z	Double
Sensor9.sn	sn	String

Sensor9.stdev_x	stdev_x	Double
Sensor9.stdev_y	stdev_y	Double
Sensor9.stdev_z	stdev_z	Double
Sensor9.temp	temp	Double
Sensor9.temp_state	emp_state	Int64
Sensor10.cf_state_x	cf_state_x	Int64
Sensor10.cf_state_y	cf_state_y	Int64
Sensor10.cf_state_z	.cf_state_z	Int64
Sensor10.cf_x	cf_x	Double
Sensor10.cf_y	cf_y	Double
Sensor10.cf_z	cf_z	Double
Sensor10.iso_state_x	iso_state_x	Int64
Sensor10.iso_state_y	so_state_y	Int64
Sensor10.iso_state_z	iso_state_z	Int64
Sensor10.iso_x	iso_x	Double
Sensor10.iso_y	iso_y	Double
Sensor10.iso_z	iso_z	Double
Sensor10.kurt_x	kurt_x	Double
Sensor10.kurt_y	kurt_y	Double
Sensor10.kurt_z	kurt_z	Double
Sensor10.peak_state_x	peak_state_x	Int64
Sensor10.peak_state_y	peak_state_y	Int64
Sensor10.peak_state_z	peak_state_z	Int64
Sensor10.peak_x	peak_x	Double
Sensor10.peak_y	peak_y	Double
Sensor10.peak_z	peak_z	Double
Sensor10.timestamp	timestamp	Int64
Sensor10.rms_state_x	rms_state_x	Int64
Sensor10.rms_state_y	rms_state_y	Int64
Sensor10.rms_state_z	rms_state_z	Int64

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Sensor10.rms_x	rms_x	Double
Sensor10.rms_y	rms_y	Double
Sensor10.rms_z	rms_z	Double
Sensor10.skew_x	skew_x	Double
Sensor10.skew_y	skew_y	Double
Sensor10.skew_z	skew_z	Double
Sensor10.sn	sn	String
Sensor10.stdev_x	stdev_x	Double
Sensor10.stdev_y	stdev_y	Double
Sensor10.stdev_z	stdev_z	Double
Sensor10.temp	temp	Double
Sensor10.temp_state	emp_state	Int64









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**Website**

<http://www.flir.com>

**Customer support**

<http://support.flir.com>

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