# **Phantom Gateway 2.0 Firmware version 56**

To load FW version 56 via the Internet, use the **Check Online Update** button in the System Tools tab of the Gateway Admin Console.

System firmware update			
CHECK ONLINE UPDATE			
I Firmware file			
UPDATE			

For manual firmware updates, the Firmware file may be downloaded from this URL:

https://pfw.erbessd-instruments.com/test/phantom/files/gw2/gwupdate-56.bin

New features/functionality included in Phantom Gateway 2.0 Firmware Version 56 are:

## **Clear Old Sensors**

A new **Clear Old Sensors** icon is located at the top right of the Live State screen in the Gateway Admin Console.



Phantom Gateways keep a record of any sensor they have detected via Bluetooth advertising. To clear that list, and remove them from the Live State screen, click this button, then select **Forget**. Only sensors that are actively advertising within range of the gateway will be now shown.

Clear old sensors form the view		
Days 1		
	FORGET	CLOSE

## EPH-V10/V11 Firmware version 188

Gateway FW56 contains this new FW for Phantom Vibration sensors. Just press the Update button!

### **Configurable Bluetooth Advertising Interval**

Previously, the interval was fixed at 2 seconds. A parameter has been added to the **In-Sensor Settings** screen allowing the interval to be set manually. This parameter is particularly useful in triggering applications to ensure that a Phantom sensor's channel states are updated to the Gateway in less than 2 seconds. **Note** – lowering the default uses more battery life!



#### Send RMS Data to Database Interval

A new parameter that determines how often the Gateway will send RMS information to the database, based on the **Sensor Update Interval.** 

When the Sensor Update Interval elapses, a Phantom sensor will transmit various information to the Gateway, based on the sensor model. This includes:

- 1. Velocity RMS
- 2. Internal Temperature
- 3. Signal Strength
- 4. Battery voltage
- 5. Firmware version

All information is automatically sent to the database (EI-Analytic or local) by the Gateway.

Since RMS Velocity alarms are checked by the Gateway when it receives this periodic information, it is sometimes desirable to set the Sensor Update Interval to a low value, for example one minute. The result is an RMS entry in the database every minute. Even though RMS data is extremely small in size, it requires action to periodically delete the unwanted entries. Setting to one minute results in 1440 entries per sensor, per day.

This parameter is located in a new Tab in the **Sensor collection settings** called **Misc** and defines how may *counts* or Sensor Update intervals should occur before the Gateway sends information to the database.

Sensor collection settings	
Timed collection	~
Triggered collection	~
Velocity RMS Alarms	~
Custom collection settings	~
Speed sensor link	~
Misc	^
Report to database after every updates 1	¢ count
If you don't want to report every sensor update (likely because you have set it lo alarms), you can setup to send to your database less data.	ow to check for
C.	ANCEL SET

This allows the Update interval to be set to a low value, but not impact the database. For example, setting it to 120 counts for a 60 second Sensor Update interval would mean the Velocity RMS alarms are checked every minute, but data is only sent every two hours.

Note – The Sensor Update Interval has a direct impact on sensor battery life!

### **Battery Conversion checkbox**

For Generation 1 EPH-V10 and V11 vibration sensors only - that have a battery conversion kit installed. Select the checkbox in the **Misc** tab of the **Sensor Collection Settings**. This ensures the correct battery voltage levels are used in determining the color of the battery indicator shown in EI-Analytic (Devices), WiSER Vibe and DigivibeMX software (Phantom>Status). This parameter will not appear in the **Misc** tab for a Gen 3 V10E or V11E sensor.

Sensor collection settings	
Timed collection	~
Triggered collection	~
Velocity RMS Alarms	~
Custom collection settings	~
Speed sensor link	~
Misc	^
This sensor is using the Phantom Battery Conve	rtion Kit
Report to database after every updates	
1	© coun
	CANCEL SE





## **EPH-G62 Dry Contact -new Firmware**

FW Version 108 for this Phantom sensor is now included in the Gateway. Changes include:

 A Debounce parameter that sets the minimum amount of time a dry contact sensor channel must remain in the same state before switching states, in order for the change to be detected. Previously, a relay may have switched from on to off or vice versa too quickly for the sensor to detect. The value defaults to the lowest setting – 20 ms.

In sensor settings	
General	~
Dry Contacts	^
Debounce 20	# milliseconds
	CANCEL SET

• The advertising interval for the EPH-G62 is now hard-coded to a lower value to update the Gateway quicker for triggering applications.

# Modbus/MQTT/OPC UA sensor triggering

Firmware version 56 now offers the ability to trigger a V10/V11 vibration sensor waveform collection based on communication from a Modbus, MQTT or OPC/UA server.

This is functionally the same as clicking the **Collect Waveform Now** button for a sensor in the Live State screen.

Modbus example:

Create registers for the sensor in the Modbus tab of the Gateway Admin Console:

Enable Modbus server	
Connect to the Gateway's modbus server on port 502 Select a sensor 189301939	
Sensor value	
Sensor internal temperature	
Vibration velocity RMS (0)	
Vibration velocity RMS (1)	
Vibration velocity RMS (2)	
Trigger waveform collection (write only)	
Trigger state update collection (write only)	

Select a sensor value and press add.

Enable Modbus	s server				
Connect to the Gate	eway's modbus server on p	ort 502			
Select a sensor 189301939					
Concorvelue					
Sensor value					
ADD					
Register	Sensor	Data type	Field	Current Value	Actions
0	189301939	float	Trigger waveform collection (write only)		≣ ∔ ↑
2	189301939	float	Trigger state update collection (write only)		≣ + +
SAVE					

In this example, when the Modbus server writes a "1" in register 0, it will trigger a waveform collection. If a "1" is written into register 2, an RMS update will be sent.