## **Husqvarna**



## Husqvarna Fleet Services Machine Sensor



#### **Machine Sensor**

Please read these instructions carefully before using the device.



#### Safety and Regulatory Information

# IMPORTANT: A complete User Manual is is built into the Fleet services different applications as digital content or pdf document.

To ensure that the device is used safely, follow all safety and operating instructions in this manual. If the device is not used as described in this manual, the safety features might be impaired.

⚠Warning: Non compliance with the warnings and/or the instructions for use may damage the device and/or its components or injure the operator.

Take extreme care under the following conditions when using the device:

- For your own safety and that of the device, you must follow the procedure described in this instruction manual.
- Do not use this device in a location where there is explosive gas in the vicinity. The use of this device in a location where there is explosive gas could result in explosion.
- Take care not to allow water to get into the device. The use of the device in a wet state could result in electrical shock or fire.
- · Do not remove either the cover or panel.
- Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### **Symbols**



Please read the user manual carefully and make sure you understand the instructions before using the device.



This device is in accordance with applicable EC directives.



Environmental marking. Symbols on the device or its packaging indicate that this device cannot be handled as domestic waste. It must instead be submitted to an appropriate recycling station for the recovery of electrical and electronic equipment.

#### NOTICE:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- · Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### Notes, Cautions and Warnings

A NOTE provides important information about your Husqvarna Fleet Service (HFS) system.

A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

⚠WARNING indicates a potential risk for property damage, personal injury or death.

Note: This document provides important information about your **Husqvarna Fleet Service** (HFS) system!

- AWARNING: Use of tools, adjustments, procedures, connections or battery type other than those specified in this documentation may result in exposure to shock, electrical hazard, and/or mechanical hazard.
- Husqvarna Fleet Services devices are not designed for use in hazardous environments.
- ACAUTION: Only operate your machine sensor with cover removed when replacing battery and/or verifying LED indications.
- Do not use damaged equipment.

#### When working inside your device

#### **↑** WARNING:

- ADo not attempt to service the equipment yourself, exept as explained in the documentation or in instructions otherwise provided to you by Husqvarna dealer. Always follow installation and service instructions closely.
- A Internal components may become very warm during normal operation. Before touching any internal components, allow time for them to cool.

#### **Battery Safety**

#### **⚠WARNING:**

- ⚠ Using an incompatible battery may increase the risk of fire or explosion. Replace the battery only with compatible battery type VARTA CR2450.
- A damaged battery may pose a risk of personal injury.

  Damage may include impact or shock that dents or punctures the battery, exposure to a flame, or other deformation. Do not disassemble the battery.
- ⚠Do not expose (store or place) any Husqvarna Fleet
  Services device to a heat source such as a radiator, fireplace,
  stove, electric heater, or other heat-generating appliance
  or otherwise expose it to temperatures in excess of 65°C
  (149°F). When heated to excessive temperatures, battery
  cells could vent or explode, posing risk of fire.
- ⚠ Do not ingest battery, chemical burn hazard. This device contains a coin cell battery. If the battery is swallowed, it can cause severe internal burns or death. Keep new and used batteries away from children. If the battery compartment does not close securely, stop using the device and keep it away from children. If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

### Waste Electrical and Electronic Equipment (WEEE) Directive



In the European Union, this label indicates that this device should not be disposed of with household waste. It should instead be left at a suitable recycling center to recycle its electronic components and batteries. By ensuring this device is disposed of correctly,

you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this device. For more detailed information about recycling of this device, please contact your local council office, your household waste disposal service or the shop where you purchased the device.

### **Technical Specifications**

Modulation	MSK
Nominal Input [V]	3.0
Max Input [V]	3.4
Min Input [V]	2.6
Internal Operational Max Temperature [°C]	55
Internal Operational Min Temperature [°C]	-10
Absolute Max Temperature [°C]	60
Absolute Min Temperature [°C]	-20
Nominal RF Range [m]	20 (To BS)
Receiver type	Category 2
Transmitter type	Category 2
Nominal RF Output Power [dBm]	0
Frequence Range [GHz]	2.4000 - 2.4835
Max Current Consumption [mA]	24
Battery	VARTA CR2450 x 1
Functionality	Petrol: Pulse Engine Tachometer (500-15K rpm) nominal sensitivity of 10 cm in line of sight from source
	Electric: Engine-On Chronometer nominal sensitivity of 10 cm in line of sight from source*
	*See recommended position from on-line manual.
	Off-line data storage of 100 working hours
	Nearby Operator Tag detection
	Nominal 120 kB of data per working hour
Sensors	rpm Tachometer
	Internal Temperature (±4°C)
	Battery Status