

One Smart Spray machine data collection

Purpose

- The purpose of the data logging is to perform technically needed, used and essential field support to the OEM, to the dealers, to the owner of the machine and to the user of the machine on request.
- Logging and access to machine data is the only way to be able to identify root cause of issues and troubleshoot the system.
- Bosch therefore does log all data present on the CAN buses of our ONE Smart Spray system (proprietary CAN) plus the GPS position and an exact date/time stamp. The data is logged a SW snap into the CCU (connectivity control unit) of the system.
- When a WIFI or LTE connection is available the data may be uploaded into a Bosch cloud infrastructure. This uploads happens however only on trigger of 3 different types:
 - a DTC (diagnostics trouble code) in one of the control electronic is active
 - a DTC status request has been sent by the field support service (Bosch) remotely
 - a general data access request has been sent by the field support service (Bosch) remotely

ONE Smart Spray machine data collection

Collected data: data source & what is collected (GPS, date, time)

CAN bus 1	Ground based speed
	Sprayer curve radius
	Geometry info vehicle
	Geometry info sprayer
	Vehicle Identification Number VIN
	Spray permission
	Spray definition
	Sprayer operation mode
	Valve operation mode
	Simulated speed for maintenance
	Controller Info - Serial number
	Controller Info - SW version
	ECU voltage
	Boom pressure
	ONE smart spray parameters for image processing
	DFC multiplexer request
	ONE smart spray savings
	System ready state
	Terminal task parameters
	1/3 nozzles selector
CAN bus 2	Time synchronisation information
	FCU diagnostic, state and configuration
	Image processing parameters and sensitivity level
	Logged weed data
	Weed detector evaluation result
	Number of FCU and orientation
	Controller info: FCU SW version and parameters
2	FCU serial number
	Boom height deviation

CAN bus 3	Time synchronisation information
	SCU serial number
	MCU/SCU diagnostic, state and error trigger
	Spray permissions, operation mode, definition (PWFm) and requests to valves
	CCU diagnostic and state
	Main switches
	MCU/SCU voltage information
	Spraying request simulated for maintenance
	Live KPIs: applied area, savings
	MCU/SCU SW version
	CCU SW version
	Valves override information
	Data logging request
	CCU ID
	CCU EMEI
	Relay selection
	xarvio license
	Flashing over the air permission
	Flashing over the air status

sing on to third parties