

## Product Data Information Notice

Our machines generate data about your use, and the environment in which you use the machine, continuously and in real-time. Such data is stored on, and can be erased from, dedicated storage components on-board, as well as in a cloud environment provided that you have an active internet connection on the machine, in accordance with applicable terms and conditions. Depending on the services you have chosen, data is accessible and retrievable in accordance with the applicable terms and conditions:

- a) through the on-board interface in the machine (which may require you to procure compatible hardware to access the data stored therein);
- b) using an application programming interface (“API”);
- c) by registering and logging into one of our web applications.

Certain of the aforementioned channels may make data available with a certain delay (e.g. every 24h). The format and volume in which data is made available, depends on the channel as well:

- a) data accessed on the machine itself is typically available in the following format: J1939-compatible format, with corresponding data volumes;
- b) data accessed via the API is typically available in the format specified in the API’s documentation, with about 1 KB to 100 MB generated per machine per 30 days;
- c) data accessed via the web applications is available in the following format: .CSV, with about with a range of 1 KB to 100MB generated per machine per month.

Our machines generate the following types of data (the file name descriptions are based on ISO 15143-2:2010, ISO 15143-3:2020 and ISO 19944-1:2020):

Name	Description
Machine running state	Live operational and condition data of the machine when it is powered and operating, covering engine, fuel, hydraulics, speeds, and diagnostics [ISO 15143-2:2010]
Machine working record	Logbook data of how much work time was done in different categories (total, compaction, spreading, suspensions). It’s more about cumulative utilisation history than real-time condition or current work parameters [ISO 15143-2:2010]
Mission data	Contextual assignment information (operator, supervisor, work area, mission times) that connects machine telemetry to a specific project task [ISO 15143-2:2010]
Cumulative idle operating hours	Data points related to the total hours the engine has been on but the machine was not working [ISO 15143-3:2020]
Cumulative distance travelled	Telematics data points equivalent to the odometer and related to the lifetime

	distance a machine has moved [ISO 15143-3:2020]
Percent of DEF remaining	Data points related to the DEF tank fill level as a percentage of capacity [ISO 15143-3:2020]
Caution codes	Data points related to active warning states on the machine [ISO 15143-3:2020]
Digital input state	Data points related to the on/off status of binary signals (switches/locks/sensors). It's the standard way to exchange security or auxiliary control states via telematics [ISO 15143-3:2020]
Cumulative fuel used	Data points related to the lifetime counter of total fuel consumption. It is the fuel equivalent of an odometer, and a key input for efficiency, cost, and emissions metrics [ISO 15143-3:2020]
Cumulative active regeneration hours	Data points recording the lifetime total time spent in active DPF regeneration mode, and are key for emissions system monitoring [ISO 15143-3:2020]
Telemetry data	Data points which are observed runtime measurements from components or services running in the machine, usually time-series, automatically collected and sent for monitoring and analysis. Virtually all of the counters, operating hours, positions, speeds, and usage logs are telemetry data [ISO 19944-1:2020]
Connectivity data	Data point which are identifiers and configuration metadata that enable a device or service to connect and communicate (serials, part numbers, firmware, network/session info) [ISO 19944-1:2020]
Cloud service provider data (operations)	The logs, records, and control/maintenance data that the provider generates or needs to keep the service running (system logs, resets, password changes, message transmissions, file transfers), but only to the extent that they specifically relate to the user use of cloud-enabled features on the machine [ISO 19944-1:2020]
Cloud service provider data (access & authentication)	The user IDs, passwords, keys, tokens, and logs of access control actions used by the provider to authenticate and authorise the

	user's access to the cloud-enabled features on the machine [ISO 19944-1:2020]
Custom (Komatsu-specific)	<ul style="list-style-type: none"><li>• DEF consumption</li><li>• Fuel efficiency guidance</li><li>• E-mode time ratio comparison</li><li>• Daily load frequency</li><li>• Soot accumulation amount</li><li>• ....</li></ul>

## Contact point

For any questions related to the information provided above, you can contact [data@komatsu.eu](mailto:data@komatsu.eu).

For any questions related to product data generated by the products published on <https://www.komatsu.eu/en/excavators/mining-excavators>, you can contact [data.kgm@komatsu-mining.de](mailto:data.kgm@komatsu-mining.de).