

# Signals collected - TMFL\_J1939

NAME	DESCRIPTION	DATA_TYPE	UNIT
J1939EngineSpeed	Represents the rotational speed of the engine, typically measured in revolutions per minute (RPM)	float	None
J1939FuelRate	Represents the rate at which fuel is being consumed by the engine	float	None
J1939CoolantTemperature	Temperature of liquid found in engine cooling system	int16	None
J1939FuelTemperature	Represents the temperature of the fuel within the fuel system	int16	None
J1939AirIntakeTemperature	Temperature of air entering the air cooler in an alternator	int16	None
J1939EngineOilPressure	Represents the pressure of the engine oil circulating within the engine	int16	None
J1939TotalEngineHours	Represents the total number of hours the engine has operated since it was first commissioned	float	None
J1939IntakeManifoldTemperature	Represents the temperature of the air inside the engine's intake manifold	float	None
J1939AirFilterDifferentialPressure	Change in engine air system pressure, measured across the filter, due to the filter and any accumulation of solid foreign matter on or in the filter. This is the measurement of the first filter in a multiple air filter system. In a single air filter application, this is the only SP used. Filter numbering follows the guidelines noted in section, Naming Convention For Engine Parameters	float	None
J1939WaterInFuelIndicator	Indicates the presence of water in the fuel system, which may suggest contamination	int8	None
J1939IntakePressure	Represents the pressure of the air entering the engine's intake system	float	None
J1939EngineLoadPercent	Represents the current engine load expressed as a percentage of its maximum capacity	int8	None
J1939EngineDiagnosticsLampStatus	Indicates the status of the engine diagnostics warning lamp (e.g., on, off, or flashing)	int8	None
J1939ActualEngineTorque	The calculated output torque of the engine. The data is transmitted in indicated torque as a percent of reference engine torque (see the engine configuration message, PGN 65251). The engine percent torque value will not be less than zero and it includes the torque developed in the cylinders required to overcome friction	int16	None
J1939NominalFrictionTorque	represents the expected or baseline amount of torque required to overcome internal friction in a mechanical system	int16	None
J1939EngineSoftwareInfo	Represents information about the engine's software, such as version, build, or release details	string	
J1939EngineComponentInfo	Represents details about the engine's components, such as type, model, or configuration information	string	
J1939UpstreamDOCTemperature	Represents the temperature measured upstream of the Diesel Oxidation Catalyst (DOC)	float	None
J1939DownstreamDOCTemperature	Represents the temperature measured downstream of the Diesel Oxidation Catalyst (DOC)	float	None
J1939DeltaPDPF	Represents the differential pressure across the Diesel Particulate Filter (DPF)	float	None
J1939DPFOutletTemperatureLamp	Indicates the status of the warning lamp related to the Diesel Particulate Filter (DPF) outlet Temperature	int8	None
J1939TCACTemperature	Represents the temperature of the Turbocharger Compressor Air Cooler (TCAC)	float	None
J1939AmbientTemperature	Temperature of air inside vehicle container used to accommodate cargo	float	None
J1939DPFLevelStatus	Represents the current status or level of soot and ash accumulation in the Diesel Particulate Filter (DPF)	int8	None
J1939DPFSootPercentageLoad	Represents the percentage of soot accumulation in the engine or exhaust system relative to its maximum capacity	int8	None
J1939RegenerationNumber	represents the total count of Diesel Particulate Filter (DPF) regeneration events that have occurred	int64	None
J1939DPFLampCommand	Represents the command signal to turn the Diesel Particulate Filter (DPF) warning lamp on or off	uint8	None
J1939DPFActiveRegenerationActive	Indicates that diesel particulate filter active regeneration is available for initiation through Aftertreatment Regeneration Force Switch (SPN 3696) 00b = Not ready for initiation, 01b = Ready for initiation, 10b = Reserved, 11b = Not Available	uint8	None
J1939DPFActiveRegenerationInhibited	Indicates the state of diesel particulate filter active regeneration inhibition 00b = not inhibited, 01b = inhibited, 10b = reserved for SAE assignment, 11b = not available This SP indicates the reason for the diesel particulate filter regeneration not being initiated or being exited prior to completion. When this state becomes active, the system will not initiate an active regeneration or will exit an active regeneration. If the reason for inhibiting is not covered by SPNs 3703 thru 3717 or 5629, a request for a status parameter should be submitted to the SAE Truck and Bus J1939 Request Processing Group to have the reason added	uint8	None
J1939DPFConditionsNotMetForActiveRegeneration	Tells joystick 1 to switch on/off/blinking lamp 9 00b = Off 01b = On 10b = Blinking 11b = Don't care / Take no action	uint8	None
J1939DPFAshLoad	Indicates the ash load percent of diesel particulate filter 1. 100% is the level at which diesel particulate filter ash service should be performed	uint8	None

NAME	DESCRIPTION	DATA_TYPE	UNIT
J1939AftertreatmentRegenerationInhibitSwitch	Indicates the state of a switch available to the operator that inhibits aftertreatment regeneration. 00b = not active, 01b = active	uint8	None
J1939AftertreatmentRegenerationForceSwitch	Indicates the state of a switch available to the operator that forces aftertreatment regeneration. 00b = not active, 01b =active	uint8	None
J1939SeatPresenceState	represents whether an operator is detected in the seat and the correct actions are taken	uint8	None
J1939MLIState	State of MLI based on weight triggered, stabilizers down and reach out	uint8	None
J1939EngineWaterLevel	Represents the current level of wate in the engines cooling system	uint8	None
J1939HydraulicOilTemperatureTank	represents the temperature of the hydraulic oil within the tank	int16	None
J1939FuelLevel1	Represents the fuel level	float	None
J1939EngineShutdown	Indicates whether the engine has been shut down or is in the process of shutting down	uint8	None
J1939MLI1	MLI Placeholder	uint8	None
J1939MLI2	MLI Placeholder	uint8	None
J1939MLI3	MLI Placeholder	uint8	None
J1939MLI4	MLI Placeholder	uint8	None
J1939MLI5	MLI Placeholder	uint8	None
J1939MLI6	MLI Placeholder	uint8	None
J1939TemperatureSensor1	Placeholder	int16	None
J1939PressureSensor1	Placeholder	float	None
J1939TemperatureSensor2	Placeholder	int16	None
J1939PressureSensor2	Placeholder	float	None
J1939TemperatureSensor3	Placeholder	int16	None
J1939PressureSensor3	Placeholder	float	None
J1939ServiceNumber	Represents the unique identifier assigned to a specific maintenance	int16	None
J1939MachineHoursServiceCompletedAt	Represents the machine operating hours recorded when the last service was completed	int32	None
J1939MachineHoursTillNextService	Represents the remaining machine operating hours before the next scheduled service is due	int32	None
J1939ServiceProvider	Represents the name or identifier of the service provider responsible for machine maintenance or support	int16	None
J1939TiltAngleRollOffset	Roll offset reported by (e)Moffett in range 0-36000	uint16	None
J1939TiltAnglePitchOffset	Pitch offset reported by (e)Moffett in range 0-36000	uint16	None
InclinationEstimatorCalibrationRoll	Moffett inclination estimator algorithm roll calibration value	double	None
InclinationEstimatorCalibrationPitch	Moffett inclination estimator algorithm pitch calibration value	double	None
InclinationEstimatorCalibrationYaw	Moffett inclination estimator algorithm yaw calibration value	double	None
InclinationEstimatorCalibrationInvertPitch	Moffett inclination estimator algorithm invert pitch calibration value	bool	None
InclinationEstimatorCalibrationRcpX	Moffett inclination estimator algorithm RCP X calibration value	double	None
InclinationEstimatorCalibrationRcpY	Moffett inclination estimator algorithm RXP Y calibration value	double	None
InclinationEstimatorCalibrationRcpZ	Moffett inclination estimator algorithm RCP Z calibration value	double	None
InclinationEstimatorCalibrationTuneKp	Moffett inclination estimator algorithm Tune Kp calibration value	double	None
InclinationEstimatorCalibrationTuneKi	Moffett inclination estimator algorithm Tune Ki calibration value	double	None
InclinationEstimatorCalibrationTuneC	Moffett inclination estimator algorithm Tune C calibration value	double	None
TMFLdiLiftPressure	Lift pressure - Pressure observed on the side of the cylinder pushing the fork up the mast	uint8	bar
TMFLdiLowerPressure	Lower pressure - Pressure observed on the side of the cylinder lowering the fork down the mast	uint8	bar
TMFLdiStabiliserPressure	Stabiliser pressure - Pressure observed for the hydraulic circuit moving the stabiliser legs	uint8	bar
TMFLdiSuperReachPressure	Super reach pressure - Pressure observed for the hydraulic circuit moving the pantograph, either extending or contracting the fork from the mast	uint8	bar
TMFLdiDifferentialPressure	Differential pressure - Pressure difference between lifting and lowering sides of the cylinder moving the fork up and down the mast	uint16	bar