

Signals in TSP Agreement	Signal Measurements, Reported to Server	Cummins Engine Measurement Signal Name from Bosch BLv2/3	6/16/2022 Data Sample Rate in VMS BLScaledv7- J_Enginev2	Value sent from Bosch	Sample Value	Description of Data	Signal Information Notes
VIN	10 Secs., every 2 mins			ASCII (Text)	SPVNA6JF062550022	17 character vehicle identification Number	Signal is not included in Hino or Cummins measurement stream but should be sent to TSP to identify vehicle
Hi Resolution Vehicle Distance	10 Secs., every 2 mins	Hi_Res_Vehicle_Distance	10s	Decimal	Min 0 Max 42949667295	ECU Total Accumulated Mileage in km	Decimal Number sent from vehicle read in km
Total Fuel Used	10 Secs., every 2 mins	Total_Fuel_Used	10s	Decimal	Min 0 Max 42949667295	ECU Total Accumulated Mileage in km	Decimal Number sent from vehicle read in km
Total Engine Hours	10 Secs., every 2 mins	Total_Engine_Hours	10s	Decimal	Min 0 Max 42949667295	Lifetime Total amount of Fuel used as calculated by the Engine ECU in liters	Decimal Number sent from vehicle read in Liters
Total Idle Fuel Used	10 Secs., every 2 mins	Total_Idle_Fuel_Used	10s	Decimal	Min 0 Max 210554000	Lifetime Total amount of Fuel used as calculated by the Engine ECU in liters	Decimal Number sent from vehicle read in Liters
Total Idle Hours	10 Secs., every 2 mins	Total_Idle_Hours	10s	Decimal	Min 0 Max 210554000	Lifetime accumulation of engine running hours	Decimal Number sent from vehicle read in hours
Coolant Temp	10 Secs., every 2 mins	Engine_Coolant_Temp	10s	Decimal	Min 0 Max 42949667295	Lifetime accumulation of engine running hours	Decimal Number sent from vehicle read in hours
Engine RPM	10 Secs., every 2 mins	Engine_RPM	10s	Decimal	Min 0 Max 42949667295	Lifetime calculation of the total amount of fuel used at Idle in Liters	Decimal Number sent from vehicle read in Liters
Park Brake Switch	10 Secs., every 2 mins	Parking_Brake_Switch	10s	Decimal	Min 0 Max 210554060.75	Lifetime calculation of the total amount of hours engine is idled in hours	Decimal number sent from vehicle read in hours
Brake Switch	1 Sec., every 2 mins	Brake_Switch	1s	Decimal	Min 0 Max 210554060.75	Lifetime Calculation of the total amount of hours engine is idled in hours	Decimal number sent from vehicle read in hours
Cruise Set Switch	10 Secs., every 2 mins	Cruise_Set_Switch	10s	Decimal	Min -40 Max 250	Engine Coolant Temperature in Degrees Celcius	Decimal number sent from vehicle read in Celcius
Cruise Resume Switch	10 Secs., every 2 mins	Cruise_Resume_Switch	10s	Decimal	Min -40 Max 250	Engine Coolant Temperature in Degrees Celcius	Decimal number sent from vehicle read in Celcius
Wheel-based Vehicle Speed	1 Sec., every 2 mins	Vehicle_Speed	1s	Decimal	Min 0 Max 16383.75	Engine Speed in Revolutions per Minute	Decimal number sent from vehicle in RPM
PTO state	10 Secs., every 2 mins		1s	Decimal	Min 0 Max 16383.75	Engine Speed in Revolutions per Minute	Decimal number sent from vehicle in RPM
Intake Air Pressure	10 Secs., every 2 mins	No Signal	10s	Decimal	1 On 0 Off	Parking Brake Switch status On or Off	Decimal number sent from vehicle On/Off signal
Common Rail Pressure	10 Secs., every 2 mins	No Signal	10s	Decimal	1 On 0 Off	Parking Brake Switch status On or Off	Decimal number sent from vehicle On/Off signal
Total Fuel with PTO	10 Secs., every 2 mins	Total_Fuel_with_PTO	10s	Decimal	1 On 0 Off	Service Brake Switch status On or Off	Decimal number sent from vehicle On/Off signal
Total PTO time	10 Secs., every 2 mins	Total_PTO_Time	10s	Decimal	1 On 0 Off	Service Brake Switch status On or Off	Decimal number sent from vehicle On/Off signal
DEF Level Dash Display	10 Secs., every 2 mins	No Signal	10s	Decimal	1 On 0 Off	Cruise Control "set" switch status On or Off	Decimal number sent from vehicle On/Off signal
DEF Tank Level Warning	10 Secs., every 2 mins	Alttrtrmt1DEFtnkLvlIndicator	10s	Decimal	1 On 0 Off	Cruise Control "set" switch status On or Off	Decimal number sent from vehicle On/Off signal
SCR System Warning	10 Secs., every 2 mins	AlttrtrmtSCROprrIndcmtSvrtly	10s	Decimal	0,1,2,3,4,5,6,7	Cruise Control "Resume" switch status On or Off	Decimal number sent from vehicle On/Off signal
DEF Quality warning Flag	10 Secs., every 2 mins	DEF_Quality_Warning_Flag	10s	Decimal	0,1,2,3	Cruise Control "Resume" switch status On or Off	Decimal number sent from vehicle On/Off signal
DPR PM Soot Level	10 Secs., every 2 mins	DsPrtctctFilter1SootLoadPercent	10s	Decimal	0-100	Wheel Based vehicle speed read in km/hr	Decimal number sent from vehicle km/hr
Fuel Level	10 Secs., every 2 mins	FuelLevel1	10s	Decimal	0-100	Wheel Based vehicle speed read in km/hr	Decimal number sent from vehicle km/hr
Instant Fuel Consumption	10 Secs., every 2 mins	Instant_Fuel_Consumption	10s	Decimal	0-100	Power Take Off status On or Off	Decimal number sent from vehicle On/Off signal
Accelerator Pedal Position	10 Secs., every 2 mins	APP	1s	Decimal	0-100	Intake Air Pressure measured in kpa	Decimal value sent from vehicle read in kpa "Turbo Boost Pressure"
Intake Air Temp (Airflow)	10 Secs., every 2 mins	No Signal	10s	Decimal	0-100	Fuel Pressure at the Common Rail measured in Mpa	Decimal value sent from vehicle Fuel pressure in Megapascals
DEF Level Actual %	10 Secs., every 2 mins	Alttrtrmt1DsExhstFldTankLevel	10s	Decimal	0-100	Lifetime calculation of the total amount of fuel used with PTO engaged in L	Decimal value sent from vehicle read in Liters
MIL Status	10 Secs., every 2 mins	OBDMalfunctionIndicatorLampCmd	10s	Decimal	0-100	Lifetime calculation of the total amount of fuel used with PTO engaged in L	Decimal value sent from vehicle read in Liters
SVS Light	10 Secs., every 2 mins	EnoAmberWarningLampCmd	10s	Decimal	0-100	Lifetime calculation of total Power Take of engaged time in hours	Decimal value sent from vehicle in hours
WIF Light	10 Secs., every 2 mins	WaterInFuelIndicator	10s	Decimal	0-100	Lifetime calculation of total Power Take of engaged time in hours	Decimal value sent from vehicle in hours
DTC Engine Transmitted	Upon Event	TSP Message should be from DTC chart in Edge portal					
Ignition State	10 Secs., every 2 mins	Next Bosch software release will have Ignition On/Off signal (late June?) unsure of signal contents still					
Harsh Braking events	10 Secs., every 2 mins	Calculated by Back End using vehicle speed					
Harsh Acceleration events	10 Secs., every 2 mins	Calculated by Back End using vehicle speed					
Trip Mileage	10 Secs., every 2 mins	Calculated by Back end using start and stop odometer value					
Fault Code Source	10 Secs., every 2 mins	From Remote measurement description field, Hino Engine or Doser module/ Cummins Engine, Transmission, ABS					
GPS Location	10 Secs., every 2 mins	From Bosch					
5MPH Alert after Stopped at 0 for 3+ seconds	Upon Event	Calculated by Back End using vehicle speed. Bosch unit will not certify for ELD use due to boot up time					

DEF_Level_Dash		
Decimal Value		Description
1		0%
2		5%
3		10%
4		25%
5		40%
6		55%
7		70%
8		85%
9		100%

Afttrtrtmnt1DEFTnkLwLvelIndicator		
Decimal Value		Description
1		On
0		Off

SCR_System_Warning		
Decimal Value		Description
0		Off
1		On
2		Off
3		Off

DEF_Tank_Level__Warning		
Decimal Value		Description
0		Off
1		Flashing
2		Low DEF
7		Off

AfttrtrtmntSCROprtrIndcmntSverity		
Decimal Value		Description
0		Off
1		Inducement Level 1
2		Inducement Level 2
3		Inducement Level 3
4		Inducement Level 4
5		Inducement Level 5
6		reserved
7		N/A

DPR_PM		
Decimal Value		Description
0		0%
1		10%
2		20%
3		30%
4		40%
5		50%
6		60%
7		70%
8		80%
9		90%
10		100%