packetId	idHex	name	unit	numBits	Reported by	Comment	Calculated in-app	Measurement accuracy	Accuracy comment	Source	Classic Model S	Newer cars
14	00E	Steering angle	deg	16	?			10		Chouinard/teslalog.com	x	x
258	102	Battery current	A	16	BMS			10		WK057/Skie.net	x	x
258	102	Battery power	kW	16	BMS		x	10		scan my tesla	x	x
258	102	Battery voltage	V	16	BMS			10		WK057/Skie.net	x	x
262	106	Rr motor RPM	RPM	16	Rear drive unit			10		WK057/Skie.net	x	x
277	115	Fr motor RPM	RPM	16	Front drive unit			10		WK057/Skie.net		x
278	116	Rr torque estimate	Nm	16	Rear drive unit	Always shows 0 on classic/RWD model S		10		WK057/Skie.net		x
278	116	Speed	km|h	16	Rear drive unit	Seems to be about 1 km/h less than the in-car speedo. Noticed that this one goes up if the rear tires are spinning (I have an RWD car), while the in-car speedo does not (which suggests this one is calculated from motor RPM or rear wheel sensors, and the in-car speedo comes from GPS or front wheels).		10		WK057/Skie.net	x	x
325	145	Fr torque estimate	Nm	16	Front drive unit			10		WK057/Skie.net		x
340	154	Rr torque measured	Nm	16	Rear drive unit			10		WK057/Skie.net	x	x
340	154	Watt pedal	%	8	Rear drive unit			10		WK057/Skie.net	x	x
360	168	Brake pedal	%	16	?			3	Scaling is still inaccurate	Chouinard/teslalog.com	x	
468	1D4	Fr torque measured	Nm	16	Front drive unit			10		WK057/Skie.net		x
468	1D4	Rr/Fr torque bias	%	1			x	10		scan my tesla	x	x
528	210	DC-DC coolant inlet	C	8	DC-DC			10		WK057/Skie.net	x	x
528	210	DC-DC current	A12	8	DC-DC	Current draw of the 12v system, including 12v battery charge		10		WK057/Skie.net	x	x
528	210	DC-DC efficiency	%		DC-DC		x	5		scan my tesla	x	x
528	210	DC-DC input power	W	8	DC-DC			10		WK057/Skie.net	x	x
528	210	DC-DC output power	W	8	DC-DC			10		WK057/Skie.net	x	x
528	210	DC-DC voltage	V12	8	DC-DC			10		WK057/Skie.net	x	x
528	210	HV power	kW	8		Battery power minus DC-DC input power	x	8		scan my tesla	x	x
562	232	Max discharge power	kW	16	BMS			10		WK057/Skie.net	x	x
562	232	Max regen power	kW	16	BMS			10		WK057/Skie.net	x	x
614	266	Non-propulsive power	kW	24			x	10		scan my tesla	x	x
614	266	Rr dissipation	kW	8	Rear drive unit	My understanding is that this is energy lost to heat, friction etc.		5	Very low res, always reports 0.5 kw as long as the drive unit is active. This throws off many other calculations, so I subtract 0.5 kw. Not sure how accurate it is on higher loads	WK057/Skie.net	x	x
614	266	Rr drive power max	KW	16	Rear drive unit	Reported by drive unit. Will differ from the limits given by BMS		10		WK057/Skie.net	x	x
614	266	Rr efficiency	%	24			x	5	Lots of assumptions, also relies on Dissipation	WK057/Skie.net	x	x
614	266	Rr input power	kW		Rear drive unit	Mech power + Dissipation	x	5		scan my tesla	x	x
614	266	Rr inverter 12V	V12	8	Rear drive unit	12v feed at drive unit		10		WK057/Skie.net	x	x
614	266	Rr mech power	kW	16	Rear drive unit	Shaft power at motor output		7	I'd like to compare this to a dyno run. On my car it seems to come close to the car's spec when the battery is full	WK057/Skie.net	x	x
614	266	Rr mech power HP	HP	16	Rear drive unit	Mech power converted to U.S. horse power	x	7	I'd like to compare this to a dyno run. On my car it seems to come close to the car's spec when the battery is full. There are many types of HP, I used KW -> Electric HP.	WK057/Skie.net	x	x
614	266	Rr regen power max	KW	8	Rear drive unit	Reported by drive unit. Will differ from the limits given by BMS		10		WK057/Skie.net	x	x
614	266	Rr stator current	A	16	Rear drive unit			10		WK057/Skie.net	x	x
648	288	Rear drive ratio	:1				x	3	Unstable numerical calculation from rear wheel rpm vs motor rpm. Assuming my car has the 9,73:1	scan my tesla	x	
648	288	Rear left	WRPM	16				5		scan my tesla	x	
648	288	Rear right	WRPM	16				5		scan my tesla	x	
680	2A8	Front drive ratio	:1				x	3		scan my tesla	x	
680	2A8	Front left	WRPM	16				5		scan my tesla	x	
680	2A8	Front right	WRPM	16				5		scan my tesla	x	
682	2AA	HVAC A/C		1	HVAC	HVAC selection		10		Chouinard/teslalog.com	x	x
682	2AA	HVAC fan speed		4	HVAC	HVAC selection		10		Chouinard/teslalog.com	x	x
682	2AA	HVAC feet		1	HVAC	HVAC selection		10		Chouinard/teslalog.com	x	x
682	2AA	HVAC on/off		1	HVAC	HVAC selection		10		Chouinard/teslalog.com	x	x
682	2AA	HVAC seat		1	HVAC	HVAC selection		10		Chouinard/teslalog.com	x	x
682	2AA	HVAC Temp L		7	HVAC	HVAC selection		10		Chouinard/teslalog.com	x	x
682	2AA	HVAC Temp R		7	HVAC	HVAC selection		10		Chouinard/teslalog.com	x	x
682	2AA	HVAC window		1	HVAC	HVAC selection		10		Chouinard/teslalog.com	x	x
741	2E5	Fr dissipation	kW	8	Front drive unit			5		WK057/Skie.net	x	x
741	2E5	Fr drive power max	kW	16	Front drive unit			10		WK057/Skie.net	x	x
741	2E5	Fr efficiency	%	56	Front drive unit			10		WK057/Skie.net	x	x
741	2E5	Fr input power	kW	24	Front drive unit			10		WK057/Skie.net	x	x
741	2E5	Fr mech power	kW	16	Front drive unit			10		WK057/Skie.net	x	x
741	2E5	Fr mech power HP	HP	16	Front drive unit			10		WK057/Skie.net	x	x
741	2E5	Fr stator current	A	16	Front drive unit			10		WK057/Skie.net	x	x
741	2E5	Fr+Rr efficiency	%	14			x	5		scan my tesla	x	x
741	2E5	HP combined	HP	16			x	10		scan my tesla	x	x
741	2E5	Mech power combined	kW	16			x	10		scan my tesla	x	x
770	302	AC Charge total	kWH	20	BMS			10	Inaccurate on older cars, didn't start counting until a certain software update	DB2	inaccurate	x
770	302	DC Charge total	kWH	32	BMS			10	Inaccurate on older cars, didn't start counting until a certain software update	DB2	inaccurate	x
770	302	SOC Min	%	16	BMS	These are off compared to the displays in the car. Kept alive for legacy reasons, and theories about where the absolute empty of the battery is		3		WK057/Skie.net	x	x
770	302	SOC UI	%	16	BMS	These are off compared to the displays in the car. Kept alive for legacy reasons, and theories about where the absolute empty of the battery is		3		WK057/Skie.net	x	x
774	306	Rr coolant inlet	C	8	Rear drive unit			10		WK057/Skie.net	x	x
774	306	Rr DC capacitor	C	8	Rear drive unit			10		WK057/Skie.net	x	x
774	306	Rr heat sink	C	8	Rear drive unit			10		WK057/Skie.net	x	x
774	306	Rr inverter	C	8	Rear drive unit			10		WK057/Skie.net	x	x
774	306	Rr inverter PCB	C	8	Rear drive unit			10		WK057/Skie.net	x	x
774	306	Rr stator	C	8	Rear drive unit			10		WK057/Skie.net	x	x
776	308	Louver 1	b	8	HVAC	Louvers in the HVAC system, location and absolute scale unknown		0		scan my tesla	x	x
776	308	Louver 2	b	8	HVAC			0		scan my tesla	x	x
776	308	Louver 3	b	8	HVAC			0		scan my tesla	x	x
776	308	Louver 4	b	8	HVAC			0		scan my tesla	x	x
776	308	Louver 5	b	8	HVAC			0		scan my tesla	x	x
776	308	Louver 6	b	8	HVAC			0		scan my tesla	x	x
776	308	Louver 7	b	8	HVAC			0		scan my tesla	x	x
776	308	Louver 8	b	8	HVAC			0		scan my tesla	x	x
792	318	A/C air temp	C	8	HVAC	Air cooled by A/C, before being mixed with hot or fresh air		10		scan my tesla	x	x
792	318	Inside temp	C	8	HVAC			10		scan my tesla	x	x
792	318	Outside temp	C	8	HVAC			10		scan my tesla	x	x
792	318	Outside temp filtered	C	8	HVAC			10		scan my tesla	x	x
794	31A	Battery inlet	C	16	HVAC	Coolant temperature at battery inlet		8		scan my tesla	x	x
794	31A	PT inlet	C	16	HVAC	Coolant temperature towards drive unit(s), at 4-way valve near battery. This valve will either series connect the battery and drive units, or run battery and drive units in parallell.		8		scan my tesla	x	x
824	338	Rated range	km	16	BMS			10		Chouinard/teslalog.com	x	x
824	338	Typical range	km	16	BMS			10		scan my tesla	x	x
898	382	Energy buffer	kWh	16	BMS			10		WK057/Skie.net	x	x
898	382	Expected remaining	kWh	16	BMS			10		WK057/Skie.net	x	x
898	382	Ideal remaining	kWh	16	BMS			10		WK057/Skie.net	x	x
898	382	Nominal full pack	kWh	16	BMS			10		WK057/Skie.net	x	x
898	382	Nominal remaining	kWh	16	BMS			10		WK057/Skie.net	x	x

packetId	idHex	name	unit	numBits	Reported by	Comment	Calculated in-app	Measurement accuracy	Accuracy comment	Source	Classic Model S	Newer cars
898	382	SOC	%		BMS	Mimics the in-car displayed %	x	7	(nominalRemaining - buffer) / (nominalFullPackEnergy - buffer) * 100.0. Works on my classic S, but have not confirmed from newer cars / different battery sizes	scan my tesla	x	x
898	382	Usable full pack	kWh		BMS	Trying to estimate 0 at the same point as SOC = 0	x	3	Needs confirmation from different cars	scan my tesla	x	x
898	382	Usable remaining	kWh		BMS	Trying to estimate 0 at the same point as SOC = 0	x	3	Needs confirmation from different cars	scan my tesla	x	x
904	388	Heater L	C	8	BMS	Air temperature after PTC heater, left side ?		3	This is guesswork, uncertain location and scaling	scan my tesla	x	x
904	388	Heater R	C	8	BMS	Air temperature after PTC heater, right side ?		3	This is guesswork, uncertain location and scaling	scan my tesla	x	x
978	3D2	Charge	kWh		BMS	Only applies to trips, BMS measured charge (charging + regen)	x	10		scan my tesla	x	x
978	3D2	Charge cycles	x	32	BMS	Charge total / nominal full pack. Meaning, as your battery gets older and worn, this number gets more inaccurate	x	5	Charge total / nominal full pack. Meaning, as your battery gets older and worn, this number gets more inaccurate	scan my tesla	x	x
978	3D2	Charge total	kWH	32	BMS	Total incoming charge as measured at BMS, meaning charging + regen		10		WK057/Skie.net	x	x
978	3D2	Discharge	kWh		BMS	Only applies to trips, BMS measured discharge	x	10		WK057/Skie.net	x	x
978	3D2	Discharge cycles	x	32	BMS	Discharge total / nominal full pack. Meaning, as your battery gets older and worn, this number gets more inaccurate	x	10	Discharge total / nominal full pack. Meaning, as your battery gets older and worn, this number gets more inaccurate	scan my tesla	x	x
978	3D2	Discharge total	kWH	32	BMS	Total outgoing charge measured at BMS. Notice that some energy is lost between charge and discharge, due to battery heat losses etc		10		WK057/Skie.net	x	x
978	3D2	Energy	kWh		BMS	Only applies to trips. Energy = Discharge - regen	x	10		scan my tesla	x	x
978	3D2	Regen total	kWH	32	BMS	Only accurate on newer cars	x	5	Inaccurate on older cars, didn't start counting until a certain software update	scan my tesla	inaccurate	x
978	3D2	Regenerated	kWh		BMS	Energy regenerated during trip	x	10		scan my tesla	x	x
1016	3F8	Floor vent L	C	16	HVAC			10	Location and scaling confirmed with Fluke	scan my tesla	x	x
1016	3F8	Floor vent R	C	16	HVAC			10	Location and scaling confirmed with Fluke	scan my tesla	x	x
1016	3F8	Mid vent L	C	16	HVAC			10	Location and scaling confirmed with Fluke	scan my tesla	x	x
1016	3F8	Mid vent R	C	16	HVAC			10	Location and scaling confirmed with Fluke	scan my tesla	x	x
1378	562	Odometer	Km	32	?	This was originally named 'Battery Odometer', but has been confirmed that it does not change when you get a new battery		10		WK057/Skie.net	x	x
1778	6F2	Cell 1..32 temp	zCC		BMS	Voltage and temperature numbers are not corresponding, but the BMS tab shows which belong to which (my guesstimations)		10		Jack Rickard/evtv.me	x	x
1778	6F2	Cell 1..96 voltage	zVC		BMS	"Cell" is not the right term, I think Tesla calls it 'brick', it is a group of cells connected in parallell. 60 and 70-75 cars have fewer cells, and the newer 75's have the last cell giving an invalid value		10		Jack Rickard/evtv.me	x	x
1778	6F2	Cell avg	Vc				x	10		scan my tesla	x	x
1778	6F2	Cell diff	Vcd				x	10		scan my tesla	x	x
1778	6F2	Cell max	Vc				x	10		scan my tesla	x	x
1778	6F2	Cell min	Vc				x	10		scan my tesla	x	x
1778	6F2	Cell temp avg	c				x	10		scan my tesla	x	x
1778	6F2	Cell temp diff	Cd				x	10		scan my tesla	x	x
1778	6F2	Cell temp max	c				x	10		scan my tesla	x	x
1778	6F2	Cell temp min	c				x	10		scan my tesla	x	x

name	unit	Calculated in-app	Accuracy, comments
Battery voltage	V		
Battery current	A		
Series/Parallel	%		
Battery power	kW	x	
Radiator fan target	rpm		
Five way valve angle	Degrees		
F power	kW		
Radiator bypass	%		
R power	kW		
F torque	Nm		Motor torque
R torque	Nm		Motor torque
F torque 186	Nm		This is believed to be axle torque
Front oil flow	lpm		
F RPM	rpm		
Rear oil flow	lpm		
R torque 108	Nm		This is believed to be axle torque
R RPM	rpm		
Max discharge power	kW		
Max regen power	kW		
Max pack voltage	V		
Min pack voltage	V		
Max discharge current	A		
Max charge current	kW		
Max charge power	kW	x	Calculated from max Charge Current * battery voltage
Steering Angle	Degrees		
Steering Speed	Deg/sec		
Accelerator Pedal	%		
Brake Pedal	0/1		
Accuracy	sec	x	Estimated accuracy of Speed signal, for timing
Consumption	wh/km	x	Real-time consumption
DC Charge total	kWh		
AC Charge total	kWh		
DC Charge	kWh	x	Counter since trip reset
AC Charge	kWh	x	Counter since trip reset
Regen total	kWh		
Drive total	kWh		
Regenerated	kWh	x	Counter since trip reset
Energy	kWh	x	Energy consumed while driving (while car is on)
Regen %	%	x	
Odometer	km		
Distance	km	x	Counter since trip reset
Avg consumption	wh/km	x	Since trip reset
Nominal full pack	kWh		
Nominal remaining	kWh		
Expected remaining	kWh		
Ideal remaining	kWh		
To charge complete	kWh		
Energy buffer	kWh		
SOC	%	x	Calculated from buffer, nominal fullpack and nominal remaining
SOC expected	%	x	Calculated from buffer, nominal fullpack and expected remaining. Some say this matches better when the battery is cold and the display shows an ice crystal
SOC UI	%		Legacy. Reported by the car, but their purpose is debated
SOC Min	%		Legacy. Reported by the car, but their purpose is debated
SOC Max	%		Legacy. Reported by the car, but their purpose is debated
SOC Avg	%		Legacy. Reported by the car, but their purpose is debated
Battery flow	lpm		Flow of battery coolant
Powertrain flow	lpm		Flow of powertrain coolant
Front oil temp	C		Oil temperature OR oil pump temperature of front drive unit
Rear oil temp	C		Oil temperature OR oil pump temperature of rear drive unit
F Inverter PCB temp	C		
F Inverter temp	C		
F Stator temp	C		
F heatsink temp	C		Inverter FET heatsink?
R Inverter PCB temp	C		
R Inverter temp	C		
R Stator temp	C		
R heatsink temp	C		Inverter FET heatsink?
Cell temp max	C		
Cell temp mid	C	x	Avg of max and min
Cell temp min	C		
Cell volt max	V		
Cell volt mid	V	x	Avg of max and min
Cell volt min	V		
Cell imbalance	mV	x	Cell Volt Max - Cell Volt min
Battery min temp	C		Reported by car, but it's not cell voltage, sensor location unknown
Battery inlet	C		Coolant temperature at battery inlet
Powertrain inlet	C		Coolant temperature towards motors/inverters
Outside temp	C		
Outside temp filtered	C		
Target PT ActiveCool	C		
Target PT Passive	C		
Target bat ActiveCool	C		
Target bat Passive	C		
Target bat ActiveHeat	C		
Charge total	kWh		
Discharge total	kWh		

Discharge cycles	x	x	Discharge total / Nominal Full Pack						
Charge cycles	x	x	Charge total / Nominal Full Pack						
Discharge	kWh	x	Counter since trip start						
Charge	kWh	x	Counter since trip start						
Stationary	kWh	x	Counter since trip start						
Blower speed target	rpm								
Evap enabled	1/0								
Evap temp	C								
Evap target	C								
12v battery volt	V								
12v battery current	A								
12v battery Amp hours	Ah								
12v battery temp	C								
FL brake est	C								
FR brake est	C								
RL brake est	C								
RR brake est	C								
Speed	km/h								
Packets per second	V	x							