

# ST8900 ENGINEERING SYSTEMS - SPECIFICATIONS AND PRICE LIST

SYSTEM FEATURES AND SPECIFICATIONS														
PRODUCTS	ST8902	ST8903	ST8906	ST8907	ST8908	ST8909	ST8951	ST8952	ST8952-2	ST8953	ST8956	8957-0.5	ST8957	ST8958
<b>CONFIGURABLE INPUTS</b>														
No. Configurable Sensor Inputs	-	8	8	16	24	32	4	8	8	16	16	24	24	32
Max Analogue Voltage/Resistance Inputs	-	8	8	16	24	32	4	5	5	13	13	21	21	29
Max. Thermocouple Inputs	-	8	8	16	24	32	4	5	5	13	13	21	21	29
Max. Strain Gauge Inputs	-	8	8	16	24	32	0	0	0	8	8	16	16	24
Max. Speed/frequency Inputs	-	8	8	16	24	32	3	3	3	11	11	19	19	27
Max inputs with DSP anti-aliasing Filter	-	8	8	16	24	32	0	0	0	8	8	16	16	24
Frequency Range for Speed Inputs	-	0-40kHz	0-40kHz	0-40kHz	0-40kHz	0-40kHz	0-2kHz	0-2kHz	0-2kHz	0-40kHz	0-40kHz	0-40kHz	0-40kHz	0-40kHz
CAN ECU Interface Support	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Synchronized Video Support	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Video Data Overlay Support	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>RECORDING</b>														
No. of Recording Channels	20	20	30	30	45	45	20	20	20	20	30	25	30	45
Max Sample Rate (incl. with DSP Filter)	50Hz	50Hz	200Hz	200Hz	200Hz	200Hz	50Hz	50Hz	50Hz	50Hz	200Hz	50Hz	200Hz	200Hz
Max Equivalent Unfiltered Sample Rate	250Hz	250Hz	1kHz	1kHz	1kHz	1kHz	250Hz	250Hz	250Hz	250Hz	1kHz	250Hz	1kHz	1kHz
Individual sample rate on each channel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
No of channels @ max. sampling rate	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Max Total Samples/Sec	1000	1000	4000	4000	4000	4000	1000	1000	1000	1000	4000	1000	4000	4000
Standard Memory Size	2MB	512KB	8MB	8MB	8MB	8MB	512KB	512KB	2MB	512KB	8MB	512KB	8MB	8MB
Download Method	CAN Bus	CAN Bus	CAN Bus	CAN Bus	CAN Bus	CAN Bus	CAN Bus	CAN Bus	CAN Bus	CAN Bus	CAN Bus	CAN Bus	CAN Bus	CAN Bus
<b>DISPLAY COMPATIBILITY</b>														
ST8900/ST8100-CONFIG Configurable	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST8950/ST8950T Configurable	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST8100 (all models)	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST8100-ECU (call for list of ECU's)	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST8130 (all models)	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST8110/ST8120/ST8150	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST8110SR	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST8600/ST8600M	✓	✓	✓	✓	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
ST8995 2x20Char. LCD Display Module	N/A	N/A	N/A	N/A	N/A	N/A	✓	✓	✓	✓	✓	✓	✓	✓
<b>SYSTEM INCLUDES</b>														
Modules	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sensor Harnesses	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
System Network Harness	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CAN Download Module/lead	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DataPro Analysis Software	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DataPro Designer Configuration Software	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>PRICES</b>														
<b>SYSTEMS</b>														
Base System	Call	Call	Call	Call	Call	Call	Call	Call	Call	Call	Call	Call	Call	Call
Upgrade to 4MB Memory	Call	-	-	-	-	-	-	-	Call	-	-	-	-	-
Upgrade to 8MB Memory	Call	-	-	-	-	-	-	-	Call	-	-	-	-	-
Upgrade to 16MB/32MB/64MB Memory	Call	-	Call	Call	Call	Call	Call	Call	Call	-	Call	-	Call	Call
<b>UPGRADES</b>														
From ST8102S/ST8102SP	-	Call	Call	Call	Call	Call	-	-	-	-	-	-	-	-
From ST8103S/ST8103SP	-	Call	Call	Call	Call	Call	-	-	-	-	-	-	-	-
From ST8104S/ST8104SP	-	Call	Call	Call	Call	Call	-	-	-	-	-	-	-	-
From ST8105SP	-	-	Call	Call	Call	Call	-	-	-	-	-	-	-	-
From ST8106SP	-	-	Call	Call	Call	Call	-	-	-	-	-	-	-	-

DATAPRO FEATURES	
VERSION 3 FEATURES:-	
<b>CHARTS/GRAPHS</b>	
Segment, lap & run analysis	✓
Interactive trackmap selection	✓
Distance or time-based	✓
Multiple-channel strips	✓
Multiple-strip charts	✓
X-Y Graphs (inc. overlay/compare)	✓
Compare/overlay laps or runs	✓
Multiple lap overlays	✓
Timeline analysis	✓
Rolling lap time graph	✓
Infinite zoom in & out	✓
Align beacon across runs	✓
<b>VIDEO</b>	
Synchronized Video Display	✓
Video Compare (time or distance based)	✓
Frame-by-frame navigation (Fwd & Rev)	✓
Data overlay on video	✓
<b>REPORTS</b>	
Run and lap comparison	✓
Statistics for selected data	✓
Split-time reports	✓
Eclectic & rolling lap time	✓
<b>HISTOGRAMS</b>	
Histogram overlay/compare	✓
<b>BUILT-IN CALCULATIONS</b>	
Automatic track maps	✓
Damper Velocities	✓
Pitch, Roll, Ride Height	✓
Braking & Acceleration Forces	✓
Combined G-force, Brake Bias, Gears	✓
Corner radius/driven line	✓
<b>MISCELLANEOUS</b>	
Lap time editor	✓
Data Export (CSV, Excel, etc.)	✓
Data archive & restore	✓
Display layout manager	✓
Operation over network	✓
Multicar Support	✓
<b>SYSTEM CONFIGURATION</b>	
User-specified channel names	✓
Individual record rate/channel	✓
Configurable LCD display layers	✓
Configurable Video data overlay	✓
Configurable alarms for each channel	✓
Automatic sensor calibration	✓
<b>SYSTEM COMPATIBILITY</b>	
MS Windows XP/2000/ME/98SE	✓
USB Port for data download & Setup	✓

# ST8900 ENGINEERING SYSTEMS - SPECIFICATIONS AND PRICE LIST

Part No.	Description	Price
<b>Lap Timing System</b>		
ST543	Lap Time Receiver	Call
ST544	Lap Time Beacon	Call
<b>Digital Sensors</b>		
ST452-901	0-5 Bar Absolute Pressure Sensor with Low Freq DSP Interface (0.5% FS Total Error Band over -20C to +80C) Dash-3 Pressure Fitting (e.g. Boost)	Call
ST452	0-5 Bar Absolute Pressure Sensor with Low Freq DSP Interface (1.0% FS Total Error Band over -20C to +80C) Dash-3 Pressure Fitting (e.g. Boost)	Call
ST453	0-3.5 Bar Absolute Pressure Sensor with Low Freq DSP Interface (1.5% FS Total Error Band over -20C to +80C) 1/8NPT Pressure Fitting (e.g. Boost)	Call
ST483	Low Freq DSP Interface for ST791 Accelerometer	Call
ST492	Pulse Amplifier (e.g. Gearbox Sensor Amplifier)	Call
ST631	0.35 bar Differential Pressure Sensor with DSP Interface (e.g. Aero tap)	Call
ST663	-100C to +200C K-Type Thermocouple Amplifier with DSP Interface	Call
ST685	8 Way -100C to +200C K-Type Thermocouple Amplifier with DSP Interface (with Lemo Connectors)	Call
ST664	200-1200C 'K' Type Thermocouple Interface with DSP Interface	Call
ST686	8 Way 0-1200C K-Type Thermocouple Amplifier with DSP Interface (with Lemo Connectors)	Call
ST669	Magnetic Speed Sensor	Call
ST670	Proximity Speed Sensor	Call
ST671	High Temp Proximity Sensor	Call
ST672	Linear Potentiometer with DSP Interface 50mm/2" (e.g. Suspension)	Call
ST673	Linear Potentiometer with DSP Interface 100mm/4" (e.g. Suspension)	Call
ST667	Linear Potentiometer with DSP Interface 150mm/6" (e.g. Suspension)	Call
ST674	Linear Potentiometer with DSP Interface 200mm/8" (e.g. Suspension)	Call
ST975/983	String Potentiometer 250mm/10" (e.g. suspension, steering) with DSP Interface	Call
ST976/983	String Potentiometer 500mm/20" (e.g. suspension) with DSP Interface	Call
ST791/483	+/- 5g Accelerometer with Low Freq DSP Interface	Call
ST985	+/-5mV output Strain gauge amplifier with DSP Interface, 300 Ohm bridge	Call
ST986	+/-10mV output Strain gauge amplifier with DSP Interface, 300 Ohm bridge	Call
ST987	+/-20mV output Strain gauge amplifier with DSP Interface, 300 Ohm bridge	Call
ST988	+/-50mV output Strain gauge amplifier with DSP Interface, 300 Ohm bridge	Call
ST982	+/-1.0V Differential Voltage Interface with DSP Interface	Call
ST983	+/-5.0V Differential Voltage Interface with DSP Interface	Call
ST984	+/-20.0V Differential Voltage Interface with DSP Interface	Call
ST693	Lambda sensor + Interface with DSP Interface	Call
ST697	HT Ignition Pickup	Call
<b>Analogue Sensors</b>		
ST740	0 to 3.5 bar/ 50 psi boost sensor (1/8"NPTF) (replacement only)	Call
ST741*	0-2 bar Fluid Pres. Sensor (M10)	Call
ST742*	0-30 psi Fluid Pressure Sensor(1/8 NPTF)	Call
ST744*	0-10 bar Fluid Pres. Sensor (M10)	Call
ST745*	0-150 psi Fluid Pres. Sensor (1/8 NPTF)	Call
ST746*	0-150 psi Fluid Pres. Sensor (1/8 BSPT)	Call
ST747-M10	10 bar/ 150 psi pressure sensor (M10)	Call
ST747-1/8NPTF	10 bar/ 150 psi pressure sensor (1/8"NPTF)	Call
ST747-1/8BSP	10 bar/ 150 psi pressure sensor (1/8"BSPT)	Call
ST749	Brake pressure sensor	Call
ST760*	150 °C Fluid Temp. Sensor (1/8 BSPT)	Call
ST761*	150 °C Fluid Temp. Sensor (M14)	Call
ST762*	150 °C Fluid Temp. Sensor (M10)	Call
ST764*	300 °F Fluid Temp. Sensor (1/8 NPTF)	Call
ST766	K' Type Thermocouple Probe	Call
ST767	Rubbing Thermocouple Probe	Call
ST782	0-200C Infra-red Pyrometer ('K' Type Thermocouple output)	Call
ST791	+/- 5g Accelerometer	Call
ST793	Lambda Sensor (replacement only)	Call
ST970	Rotary Potentiometer 120Deg (e.g.Throttle angle)	Call
ST972	Linear Potentiometer 50mm/2" (e.g. Suspension)	Call
ST973	Linear Potentiometer 100mm/4" (e.g. Suspension)	Call
ST977	Linear Potentiometer 150mm/6" (e.g. Suspension)	Call
ST974	Linear Potentiometer 200mm/8" (e.g. Suspension)	Call
ST975	String Potentiometer 250mm/10" (e.g. suspension, steering) 0-5V output	Call
ST976	String Potentiometer 500mm/20" (e.g. suspension) 0-5V output	Call
ST978	Rotary Potentiometer 360Deg (e.g.Steering)	Call
ST979	Rotary Potentiometer Sensor 120Deg (e.g. kart pedal angle)	Call
ST990	Air Temp Sensor	Call
ST991	-20 to 150 deg C temperature sensor (M6 x1)	Call

\*Note these sensors require an ST918037 Spade Terminal to MSS Adaptor Harness (0.4m)