

# Evolution

## Multi sensor system

### Overview

Evolution multi sensor system is a digital, battery-powered instrument which has interchangeable **Sensor Modules**. A common **Display Unit** recognizes any **Sensor Module** and configures the Display without programming or set-up. Designed for the mobile technician replacing the need for numerous instruments. Build a custom metering system with the **Sensor Modules** you need, drop them in the field carrying case and go to work! This system is lightweight and operates on (2) AA batteries. Add **Sensor Modules** at any time to expand your capabilities. Certain **Sensor Modules** will support RS-232 or TTL output.



DISPLAY UNIT SPECIFICATIONS	
Display	Bright LCD 5 digit and 5 Alphanumeric Characters, Bakelite, "on-target" indicator, low-battery indicator, Hold function. Memory 10 measurements. Minimum and Maximum reading recall
Accuracy	depends upon Sensor Module
Power	2 x "AA" Batteries
Dimensions	6.75 x 2.25 in (72 x 58 mm)
Weight	4 oz. (0.15 kg)
Options	RS-232 or TTL output, N.I.S.T. certificate of calibration depending upon Sensor Module

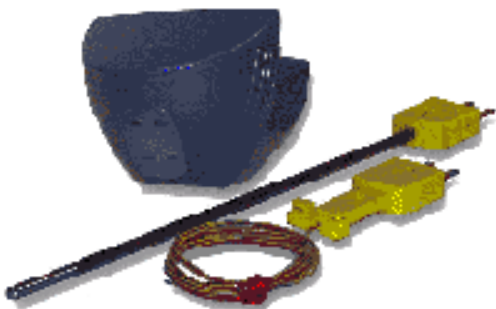


LASER TACHOMETER SPECIFICATIONS	
Laser Tachometer	Display Unit and Non-contact Laser Tachometer Sensor Module
Range	5 to 200,000 RPM
Resolution	0.1 (0 to 9,999 RPM) 1.0 (10 k to 99 k RPM) 10 (above 100k RPM)
Accuracy	± 0.01% of reading
Target Distance	up to 15 feet and 45 degrees offset
Select	RPM or RPS
Options	N.I.S.T., TTL output, RS232 output



Contact Tachometer Sensor Module pictured with optional 12" wheel

CONTACT TACHOMETER SPECIFICATIONS	
Contact Tachometer	Display Unit, Concave, Convex Tips and 10 CM Wheel. 12 inch circumference wheel is available as an option
Range	5 to 15,000 RPM
Resolution	Fixed or Auto-ranging to .0001
Accuracy	± 0.01% of reading (RPM)
Select	Inches/feet/yards/centimeters /meters per second/minutes/hours and miles per hour. Totals in imperial or metric units.
Options	12 inch circumference wheel

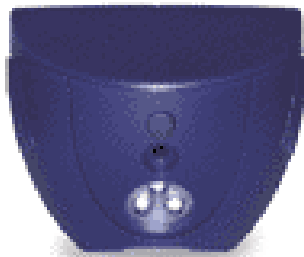


Contact Temperature Sensor module pictured with optional 36-inch wire thermocouple, K-type

DUAL CONTACT THERMOMETER	
Dual Contact Thermometer	Display Unit and Dual Probe Contact Thermometer (pictured with optional probes)
Display	T1, T2, ΔT, (T1-T2) or (T2-T1)
Range	K Type - 200 to 2500° F J Type -200 to 1800° F
Resolution	0.1 or 1.0 degree
Accuracy	± 1% of reading + 1° F (0.5° C) typical at 25° C ambient
Select	Thermocouple Type J or K and °C or °F



HUMIDITY AND THERMOMETER SPECIFICATIONS	
Humidity and Thermometer	Display Unit and Humidity and Thermometer Sensor Module
Humidity Range	10 to 95% RH
Resolution	0.5% RH
Accuracy	+ 2% RH of reading at 25° C
Response Time	10 seconds
Temperature Range	0 to +80° C (32 to +175° F)
Resolution	0.1°



LED STROBELIGHT SPECIFICATIONS	
LED Strobelight	Display Unit and LED Strobelight Sensor Module
Range	60 to 50,000 Flashes/min.
Resolution	1.0 FPM (0.01 Hz)
Modes	FPM, FPS or Flashlight
Features	Bright White LED's for stop-motion/slow-motion inspection. 10 User presets, multiply by 2, divide by 2, recalls last settings. Adjustable focus.

**EVOLUTION PRICE LIST**

Part Number	Description	Price
	<b>Packs include a Display Unit and multiple Sensor Modules with Soft Field Cases</b>	
142-6500-210	<b>Speed Pak</b> includes: Laser and Contact Tachometer Sensor Modules with Tips	
142-6500-211	<b>Dual Tach Pak</b> includes: Laser and Contact Tachometer Sensor Modules with CTE and optional 12" circumference wheel, N.I.S.T. for 6500-012	
142-6500-212	<b>Strobo/Tach Pak</b> includes: Laser Tachometer and LED Stroboscope Sensor Modules	
142-6500-213	<b>Temp/Tach Pak</b> includes: Laser Tachometer w/ N.I.S.T. and Dual Contact Thermometer w/ (1) K-type GP probe	
Planned	<b>Temp/Tach Pak Plus</b> includes: Laser and Contact Tachometers with CTE	
Planned	<b>Temp Pak</b> type GP probe	
Planned	<b>Revolution Pak</b> includes: Laser and Contact Tachometers, Infrared and Dual Contact Thermometers, Humidity/Temperature, LED Stroboscope, CTE-Tips, and K-type GP probe	

<b>Part Number</b>	<b>Complete Instruments include Display Unit and Soft Field Case</b>	<b>Price</b>
142-6500-111	Contact Tachometer includes CTE	
142-6500-112	Laser Tachometer includes N.I.S.T. Certificate of Calibration	
142-6500-113	Dual Contact Thermometer includes: (1) K-type GP probe	
142-6500-114	Non-contact Infrared Thermometer ( <i>planned</i> )	
142-6500-115	Humidity & Temperature Meter	
142-6500-116	LED Stroboscope includes N.I.S.T. Certificate of Calibration	
<b>Part Number</b>	<b>Individual Components without Soft Field Case</b>	<b>Price</b>
142-6500-010	Display Unit with (2) "AA" batteries, and User Manual	
142-6500-011	Contact Tachometer Sensor Module with CTE (concave, convex tips and 10cm wheel)	
142-6500-012	Laser Tachometer Sensor Module with 12" of Reflective Tape	
142-6500-013	Dual Contact Temperature Module	
142-6500-015	Humidity and Temperature Sensor Module	
142-6500-016	LED Stroboscope Module	
planned	Non contact Infrared Temperature Sensor Module ( <i>planned</i> )	
142-6500-010PO	Same as 6500-010 with TTL Pulse Output Option	
<b>Part Number</b>	<b>Accessories</b>	<b>Price</b>
142-6580-010	CTE (Contact Tips Evolution) includes concave, convex tip and 10 cm contact wheel with rubber "O" ring.	
142-6180-070	T-5 Reflective Tape- 5 foot roll, 0.5 inch wide	
142-6580-011	12" circumference contact wheel	
142-6580-012	Thermocouple K-type, GP, 6" Rigid Probe	
142-6580-013	Thermocouple K-type, 36" Wire Probe	
142-6580-CAL	CAL- N.I.S.T. N.I.S.T. Traceable Certificate of Calibration	
142-6580-014	Soft Field Case for Display Unit	
142-6580-015	Soft Field Case for Sensor Modules	