

About AI-Tek® Tachometers

Not all tachometers are the same, and this is certainly true of the **AI-Tek** Instruments tachometry line. Designed with severe industrial environments in mind, these units will provide reliable around-the-clock operation for years under adverse conditions.

AI-Tek Instruments is a leader in manufacturing this type of instrument.

Our prices reflect the design, quality, ruggedness and engineering of the equipment. What you really get with **AI-Tek** Instruments is a superb price performance ratio. It may not initially be the least expensive equipment available; but, in the long run, the value of this equipment is that it will outperform and outlast others.

Introduction of the New Generation Tachometer Line

The new generation **TACHPAK** and **TACHTROL** series tachometers have been designed with all of the functions and durability embodied in the previous tachometer series as well as improvements to extend performance, accuracy and function. With the exception of the **Tachtrol 20**, both **TACHPAK** and **TACHTROL** now share a common processing platform. This commonality allows both to perform identical tachometry functions, streamlines programming and minimizes the learning curve. The main physical difference between the two is the characteristic integrated display function found in all **TACHTROL** series tachometers.

Common Specifications:

Temperature -10°C to +55°C operating; -40°C to +80°C storage

Thermal Cycle 50 cycles: -40°C to +80°C; 200 cycles: -10°C to +55°C

Humidity 90% RH non-condensing per IEC 654-1, IEC 68-2-3

Vibration MIL-STD-810C Environmental Test Methods, method 514.2, procedure VIII, figure 514.2-6, curve V; 1.5g's 10-2000 Hz, 5.5 hrs./axis, 3 axis
IEC 60068-2-6, 10-150Hz, 2g, 10 sweep cycles / axis, 3 axis

Shock MIL-STD-810C Environmental Test Methods, method 516.2, procedure I and figures 516.2-2, for ground equipment; 30g's half sine, 11ms. 3 axis, 18 total
IEC 60068-2-27; 50g half sine, 11ms, 3 axis, 18 total

EMC CE Compliant
EN 61326:1997 Class A radiated and conducted emissions with amendments A1-A3
EN 61326:1997 with amendments A1-A3, Immunity
EN 61000-4-2: 1998 Electrostatic Discharge: ±4kV contact, ±8kV air
EN 61000-4-3: 1998 Radiated Immunity: 10V/m
EN 61000-4-4: 1995 Electrical Fast Transients/Burst: ±2kV AC, ±1kV I/O > 3m
EN 61000-4-5: 1995 Surges: ±1kV differential mode, ±2kV common mode, ±1kV line to ground I/O > 30m
EN 61000-4-6: 1996 Conducted Immunity: 3V
EN 61000-4-11: 1994 Supply Dips and Variations: 100%, 0.5 cycles each polarity

RoHS RoHS compliant per European Directive 2002/95/EC

Support Documents On Website Include: **TACHLINK**, Manual, Tach Training Video

Tach Package Contents: **TACHPAK 10 & 30** and **TACHTROL 10 & 30** are shipped in a single carton containing one instrument, **TACHLINK**, a manual on CD ROM, and a USB cable.

TACHTROL plus is shipped in a single carton containing one instrument and a display cable with RJ-11 terminations. **TACHTROL 10 & 30** and **TACHTROL plus Explosion Proof and NEMA 4X** are shipped in a single carton containing one instrument and accessories as described above, one infrared remote and one DIN rail mounting kit. **TACHPAK 10 & 30 Explosion Proof and NEMA 4X** are shipped in a single carton containing one rated enclosure and one instrument and accessories as described above.

It is the customer's responsibility to determine whether the product is proper for customer's use and application.

The information contained herein is subject to change without notice. Refer to the factory for verification of any details.

TACHPAK® 10 & 30 Digital Process Tachometer

Part Number Series
T77510 & T77530

CE
RoHS



T77510



T77530

TACHPAK 30 Key Features (T77530):

- Wide range of AC or DC power (12-30 Vdc, 80-264Vac 50-60Hz)
- Greatly improved instrument accuracy, processing speed and response time.
- Frequency, period or counter modes.
- User-defined inputs for logic level, averaging, alarm set points and hysteresis,
- Signal normalization and math functions allow mathematical manipulation of input signals. Results can be displayed along with user-defined units.
- Accepts sinusoidal and square wave inputs as found in variable reluctance and digital output speed sensors.
- Accepts bi-directional sensor inputs and will decode quadrature or direction signal logic
- 2 solid state relays (fast response time) and 2 mechanical relays (high power)
- Analog output: 0-20mA, 4-20mA, -20-0-(+) 20mA (can be used with bi-directional sensor)
- Two programming methods: Front panel on display or USB2.0 connectivity to PC / Windows-based **TACHLINK**.
- Utility RS485 communication allows full **TACHLINK** function over longer distances (up to 8000 ft)
- Drives up to 8 remote displays (TACHTROL plus). A single display can be up to 1000 ft away with a simple RJ11 (phone jack) connection. Longer runs, cable type and number of displays will affect distance.
- Security mode protects unauthorized access for programming or alarm resets (through display or **TACHLINK**)
- Mounts to DIN rail. Power can be applied through special DIN bus when used with **AI-TEK** power supply.
- Environmentally hardened for temperature, vibration and shock. EMC / CE compliant to current BS/ EN directives.
- Designed and manufactured compliant with RoHS.

TACHPAK 10 Key Features (T77510):

- Same as TACHPAK 30 but excludes solid state relays, analog output and utility **RS485**

Programming Features:

Programming has been greatly simplified and can be accomplished by 2 different methods. Many configurable attributes have been added to improve flexibility and function.

- **TACHPAK** 10 and 30 can be programmed with the addition of a **TACHTROL plus** remote display. Programming is accomplished by navigating through a series of nested menus. In the