TACHPAK® 10 & 30
Digital Process Tachometer

T77510

T77530

Part Number Series
T77510 & T77530

CE
RoHS

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

Programming Features (continued):

case of tachometer instruments embedded in explosion proof or **NEMA 4X** enclosures, remote access solves the problem of programming by making use of an IR link to allow full front panel control via a hand-held remote.

- **TACHLINK®:** PC / Windows-based custom software allows the user to program all configurable attributes of **TACHPAK** by PC via a USB2.0 or RS485 connection. In addition, the PC can be used to display data, perform security functions, diagnostics, analog output calibration and real-time data logging; all available through the **TACHLINK**.

Applications:

- Fast response overspeed shutdown
- Petrochemical production applications
- Pump or generator alarm
- Low speed switching
- Start-up, over/under speed switching
- Textile production applications
- Machine control
- Paper & pulp production
- Turbine speed control
- Food processing
- Conveyor alarms
- Printing industry
- Metal production
- Mining applications
- Test labs
- Generator set
- Broken or slipping belt drives

TACHPAK 30   TACHPAK 10

COVERS REMOVED FOR CLARITY
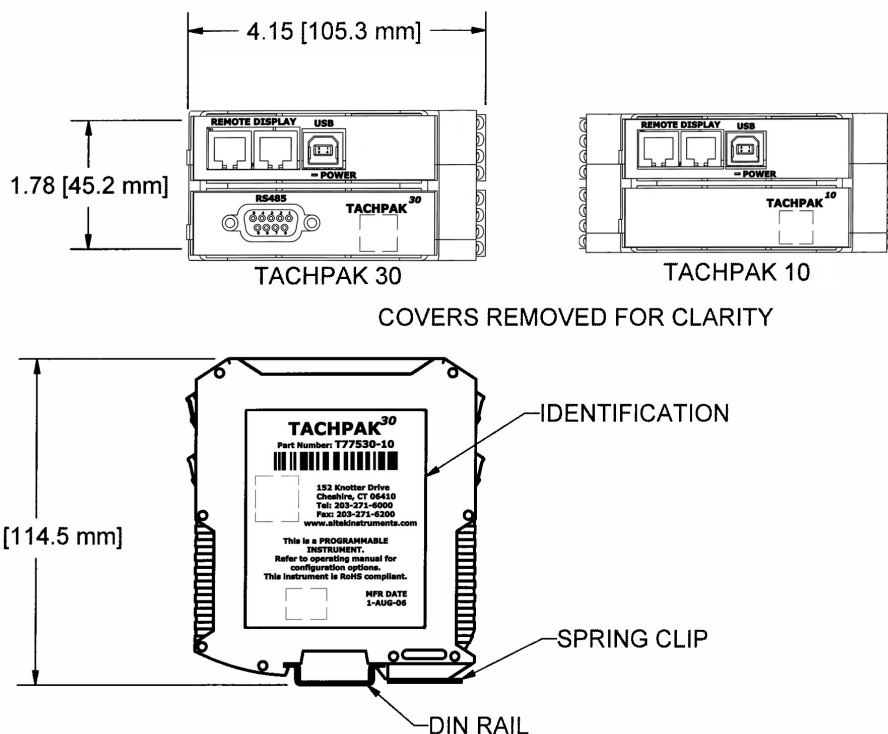
Ordering P/N	Input Power	Enclosure	Net Weight (lbs.)
T77510-10	80-264 Vac/12-30 Vdc	Standard	0.6
T77510-40	80-264 Vac/12-30 Vdc	NEMA 4X	3.4
T77510-70	80-264 Vac/12-30 Vdc	Explosion Proof	24.0
T77530-10	80-264 Vac/12-30 Vdc	Standard	0.7
T77530-40	80-264 Vac/12-30 Vdc	NEMA-4X	3.5
T77530-70	80-264 Vac/12-30 Vdc	Explosion Proof	24.0

Table 2: Connection Information			
Terminal Block	**Pin #**	**TACHPAK 30**	**TACHPAK 10**
Remote Display	Use RJ11 type connector. No individual breakout of pins.		
USB	Use USB "B" type connector. No individual breakout of pins.		
RS485 DB9	1,5	GND	Not Available
	2	Tx -	
	3	Rx -	
	6	Tx +	
	7	Rx +	
	4,8,9	Not Used	

Table 3: Connection Information			
Terminal Block	**Pin #**	**TACHPAK 30**	**TACHPAK 10**
TB1	1	Input Com	Input Com
	2	A Sig	A Sig
	3	B Sig	B Sig
	4	Direction Input	Direction Input
TB2	5	Verify -	Verify -
	6	Verify +	Verify +
	7	Reset -	Reset -
	8	Reset +	Reset +
TB4	9	Analog Out +	Not Available
	10	Analog Shield	
	11	Analog Out -	
	12	Not Used	
TB3	13	In GND	In GND
	14	12-30 Volt In	12-30 Volt In
	15	+12 Vdc Out	+12 Vdc Out
	16	Out GND	Out GND
TB5	17	Relay 1 Com	Relay 1 Com
	18	Relay 1 N.C.	Relay 1 N.C.
	19	Relay 1 N.O.	Relay 1 N.O.
	20	Not Used	Not Used
TB6	21	Relay 2 Com	Relay 2 Com
	22	Relay 2 N.C.	Relay 2 N.C.
	23	Relay 2 N.O.	Relay 2 N.O.
	24	Not Used	Not Used
TB8	25	AC/Earth Gnd	AC/Earth Gnd
	26	Not Used	Not Used
	27	AC Hot	AC Hot
	28	AC Neutral	AC Neutral
TB7	29	Digital 1 (no polarity)	Not Available
	30	Digital 1 (no polarity)	
	31	Digital 2 (no polarity)	
	32	Digital 2 (no polarity)	

Connection to 12-30 Volt In is also available on the bottom of **TACHPAK 10 & 30**. A special DIN rail power bus adapter is available as an accessory and works with the accessory power supply.