













# Model T-K3-Pro



### **Description/Application**

The T-K3-Pro is a fully modulating, gas fired, tankless on-demand water heaters specifically designed for light commercial applications. It can be either installed outdoors, indoors or direct vented. It can supply to domestic hot water systems or to heating applications (local codes dictate proper compliance). Features HRS35 copper alloy and a thicker heat exchanger drum for added durability. Up to 4 units can be easy linked without a multi-unit controller in sytems for larger applications. Please check local codes prior to installations.

#### Fuel: NG or LP

#### **Safety Features**

- Built in Freeze Protection
- Manual Reset Hi Limit (Set at 194°F)
- Overheat Cut Off Fuse
- Inlet, Outlet & Mixing Thermistors for Constant Temperature Monitoring
- Air Fuel Ratio Rod
- GFI Power Supply Connection
- Flame Sensor

### **Venting and Combustion**

- 4" Category III Stainless Steel
- Vertical or Horizontal Installation
- 50' Max Length, 5 elbows max (90° elbows = 5' equivalent length)
- Power Vent
- Electronic Ignition
- 3" Combustion Air Intake (with optional kit)
- 55 dB Noise Level at Max Output

#### **Accessories**

TK-TV10 Direct Vent Conversion Kit (optional)

TM-RE30 Temperature Remote Control (optional)

- 400' Max Distance From Water Heater
- Non-Polarized 18 Gauge Control Wiring

TM-TV13 Wall Ventilation Termination (direct vent)

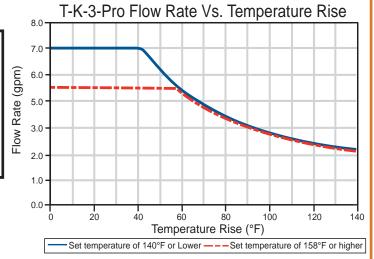
TK-RB01 Recess Box (optional)

TK-PC01 Pipe Cover (optional)

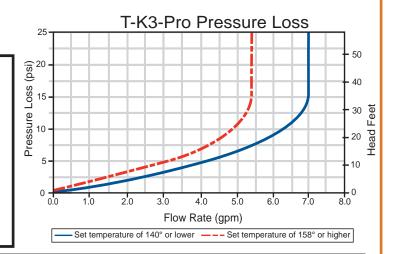
TK-TV04 Vent Cap (optional)

TK-BF01 Backflow Preventor (optional)

TK-KPWL4 & TK-KPWH4 T-Vent Terminations (optional)



Above shown rate is based on single unit only



## **Temperature Settings**

**Dip Switch:** 104°F 113°F 122°F (default) 131°F 140°F 158°F 176°F 185°F

TM-RE30 Remote Controller

Default Mode: 99°F 100°F 102°F 104°F 106°F 108°F 110°F 111°F 113°F 115°F 117°F

High Temp Mode: 99°F 100°F 102°F 104°F 106°F 108°F 110°F 111°F 113°F

122°F (default) 131°F 140°F 149°F 158°F 167°F H (176°F or 185°F depends on dispswitch setting)

## Takagi Industrial Co. USA, Inc.

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Met SCAQMD rule 1146.2 (certified by BR Lab)









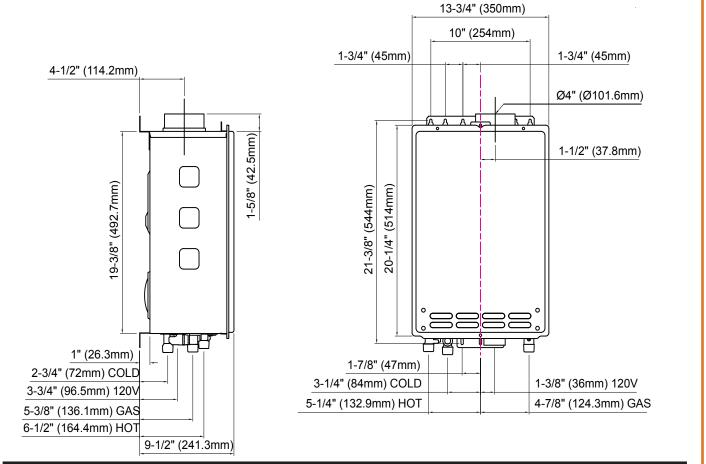












T-K3-P	Pro:								(Hot/Cold/Gas)	
	HT	W	D	WT	Volt	Amp	Flue	Intake	Connections	
	20.5"	13.8"	8.5"	40 lbs.	120	0.77	4" O.D.*	3.0" O.D. (opt	a.) 3/4" NPT	
Input			Input							
	Max BTU/h		Min BTU/h		<b>Energy Factor</b>		Thermal Eff.	AFUE	Min Press	Max. Press
NG	199,000		11,000		0.827		82.3%	0.80	5.0" W.C.	10.5" W.C.
LP	199,000		11,000		0.833		83.6%	0.81	8.0" W.C.	14.0" W.C.
	<b>GPM</b> 0.5 - 7.0**		<b>Water PSI</b> 15 - 150 PSI***		<b>Coil Cap</b> ≈0.2 Gallons					
Clearances			Тор		Bottom		Front	Back	Sides	
Indoor			12"		12"		4"	1"	2"	
Outdoor			36"		12"		24"	1"	2"	

<sup>\*</sup> Category III Required \*\*Current numbers based on factory testing, 0.4 GPM Required for Continuous Fire After initial Ignition.

Warranty: 10 years Heat Exchanger, 5 years Parts (for Residential Use) - 3 years Heat Exchanger, 3 years Parts (for Commercial Use)

## Specification

Water heater(s) shall be Model T-K3-Pro as manufactured by Takagi Industrial Company, Inc. The water heater(s) shall be a copper coil integral fin and tube construction with quick release brass or bronze waterways. Heater(s) will be factory assembled and tested.

The heater shall be vented with  $4^{\prime\prime}$  Stainless steel Category III vent pipe a distance not to exceed  $50^{\prime}$  (equivalent) feet terminating vertically or horizontially as prescribed. Intake air with optional direct vent kit may be of such material as PVC not to exceed a total of  $50^{\prime}$  (equivalent).

The heater(s) shall be controlled by onboard solid state printed circuit board monitoring incoming and outgoing temperatures with factory installed thermistors, sensing and controlling flow rate to set point temperature with control both air and gas mixture inputs to maintain thermal combustion efficiency. Unit also consists of ground fault interrupter, inline fusing, spark ignition and sensor system, aluminized stainless steel burners, air-fuel ratio rod, Hi limit switch, modulating and proportional gas valves, freeze protection sensor and heating block and overhead cut-off fuses.

The water heater(s) shall be CSA listed, exceeds the energy efficiency requirements of ASHRAE 90. 1b-1992 and listed by SCAQMD rule 1146.2 Low NOx.

<sup>\*\*\*</sup>Pressure Only Relief Valve Requires (Min. 200,000 BTUs. 150 PSI). Min 40 PSI or above recommended for maximum flow.