



**Submittal and Specification Sheet for Commercial Tankless Water Heaters**

**JOB NAME:**

**LOCATION:**

**ARCH./ENGR.:**

**WHOLESALER:**

**MECH. CONTRACTOR:**

**MODEL NUMBER:**

**BTU/HR INPUT LOW - HIGH FIRE:**

**ELECTRICAL SPECIFICATIONS:**

**NOTES:**

Heat Exchanger

- Multiple Heat Exchangers Manifoldd Together Provide Built-In Redundancy
- CT-750 Models Feature Three Heat Exchangers Manifoldd Together / CT-1000 Models Feature Four Heat Exchangers
- All Heat Exchangers are Laser Welded and Constructed with 316L Enhanced Finned Tube
- Single Circuit Helical Design Expands to Avoid Long Term Heat Exchanger Failure
- Larger Diameter Tubes Enhance Performance and Minimize Fouling to Avoid Scale Build-Up Over Time
- Heat Exchanger is Connected through Multiple EPDM Seals to Enhance Durability - No Weld Joints

Combustion System

- CT-750 has Three Independent Combustion Systems Manifoldd Together in a Common Vent System, Offering 750,000 Total BTUs and Providing a 25 to 1 Turndown Ratio
- CT-1000 has Four Independent Combustion Systems Manifoldd Together in a Common Vent System, Offering 1,000,000 Total BTUs and Providing a 33 to 1 Turndown Ratio
- Up to 98% Combustion Efficiency
- Up to 94% Thermal Efficiency
- Fully Modulating Fan
- Wide Operating Range for Gas Pressures: 3 1/2" to 14" Inlet Pressures
- Built-In Outlet Check for Cascading Multiple Units Limits Potential Back Pressure Issues
- Spark Ignition System
- Flame Monitor System with Flame Probe
- Highly Durable NIT Burner Offers Low NOx Emissions and Flame Stability

Control System

- Provides Accurate Temperature Control
- Allows Up to 4 Units to be Cascaded Together in a Common Vented System, Greatly Increasing System Turndown
- Masterless Cascade Management System – Any Unit in the Chain can Automatically Change the Setting of the Connected Units
- High Operating Temperature Control – Up to 190°F
- Programmable Vent Material Selection (PVC to CPVC) Feature Avoids Safety Issues when Operating Vent Temperatures Exceed 140°F

Additional Features

- Industry-best 6-year Commercial Heat Exchanger Limited Warranty
- Vents in PVC, CPVC, Polypropylene, or Stainless Steel
- CT-750 – Vents up to 120 Combined Feet (Two Pipe Direct Vent) or 220 Combined Feet (Power Vent) in 6" Pipe
- CT-1000 – Vents up to 65 Combined Feet (Two Pipe Direct Vent) or 130 Combined Feet (Power Vent) in 6" Pipe
- Floor Mounted with Side Panels on the Left and Ride Sides for Easy Service Access
- Compact Design Fits in Tight Spaces
- Can be Installed with and without Storage Tanks
- ASME HLW Certified
- Low NOx Certified to SCAQMD Rule 1146.2
- Lead Free Compliant, as required by the Safe Drinking Water Act, Section 1417

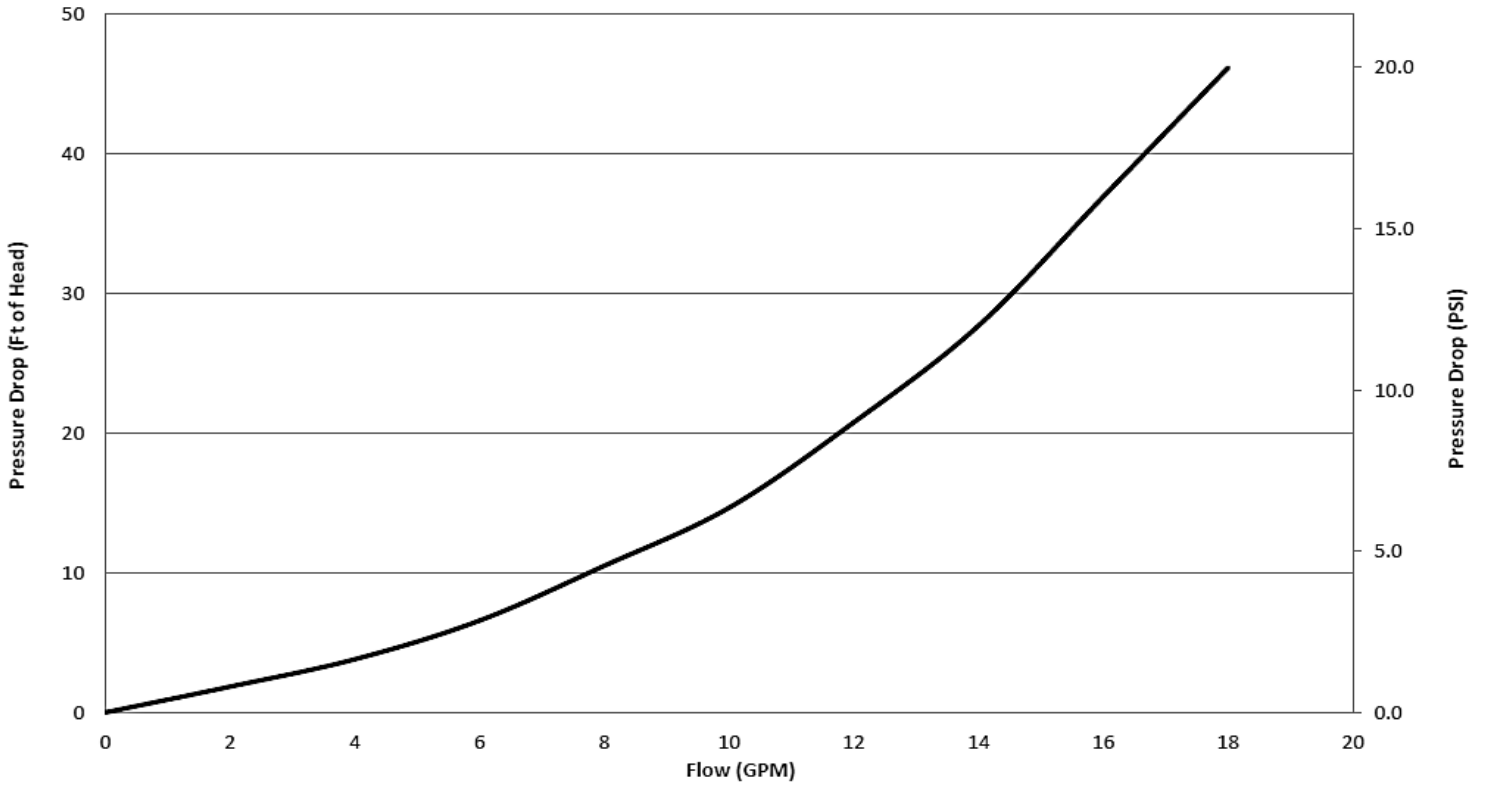
Optional Equipment

- Condensate Neutralizer (Part # 7350P-611)
- 6" Sidewall Vent Termination Kit (Part # V3000)

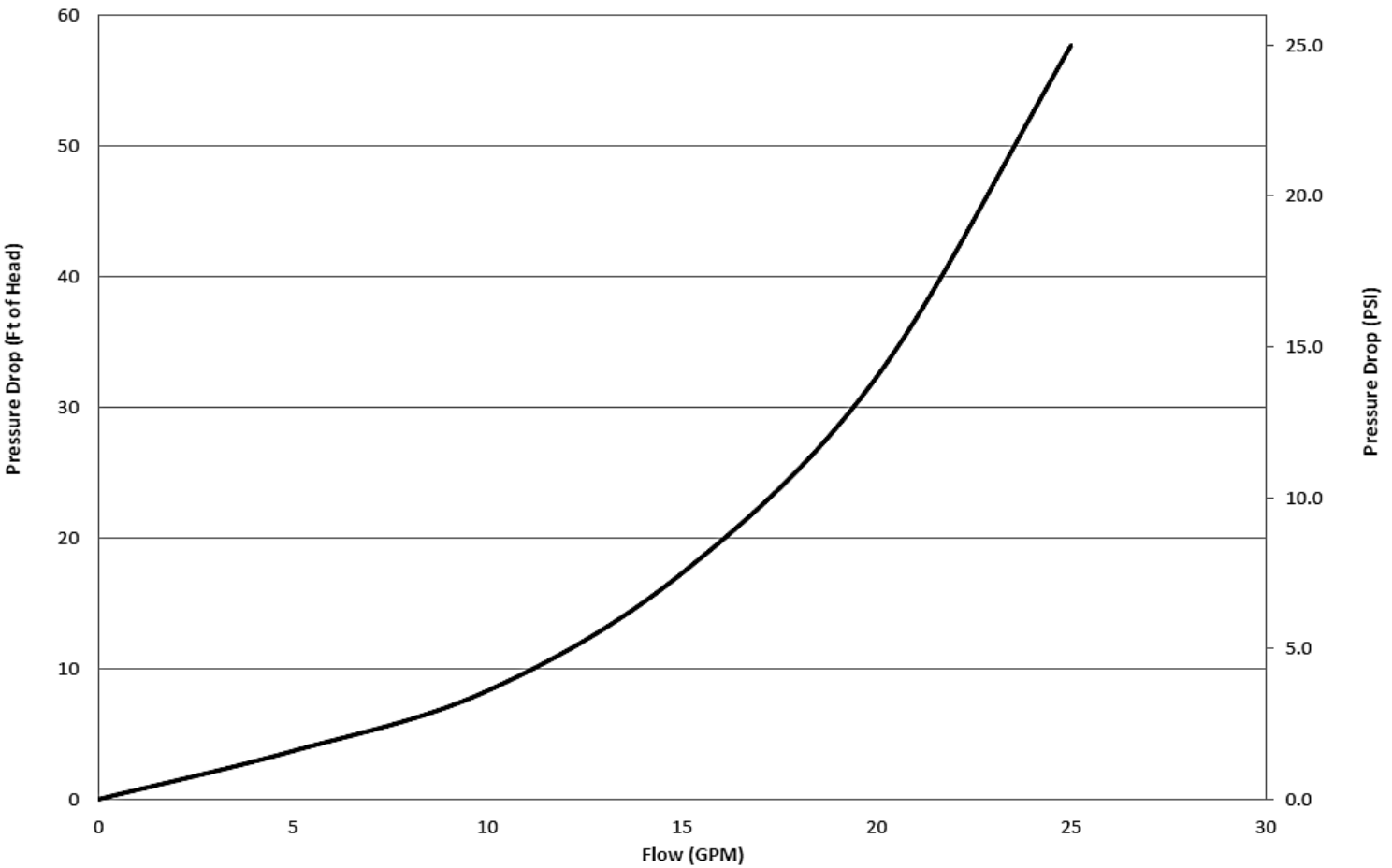
<b>Model</b>	<b>CT-750</b>	<b>CT-1000</b>
Type	Indoor, Floor Mounted, On Demand Hot Water Heater	
Fuel	Preset for NG / LP Convertible without Additional Parts	
Minimum Input (Btu/Hr)	30,000	
Maximum Input (Btu/Hr)	750,000	1,000,000
Maximum Output (Btu/Hr)	702,750	932,000
Thermal Efficiency	94%	93%
Turn Down Ratio (TDR)	25:1	33:1
Water Inlet / Outlet Connection	2" NPT	
Gas Inlet Connection	1 ¼" NPT	
Condensate Drain Connection	¾" PVC	
Maximum Condensate Flow Rate (GPH)	5.4	7.2
Dimensions H X W X D (Inches)	64 X 30 X 43.3 (48 cu. ft.)	
Service Clearances	Recommended 24" on All Sides	
Weight (lbs)	525	590
Venting Type	Direct Vent (2 pipe – intake and exhaust), Power vent (1 pipe, exhaust only)	
Venting Materials (USA)	Sch. 40 PVC, Sch. 40 CPVC, Polypropylene, Stainless Steel	
Venting Materials (Canada)	Type BH Gas Vent Classes: II A (PVC), II B (CPVC), II C (Polypropylene), I (AL-294C SS)	
Vent Size (Diameter)	6" Ø	
Max 6" Vent Length – Single Pipe / Power Vent	220 ft,*	130 ft.*
Max 6" Vent Length – Two Pipe / Direct Vent	120 ft,*	65 ft.*
*Venting Note: From the maximum lengths above, deduct 5 ft per 90° elbow and 2 feet per 45° elbow		
Ignition	Electric Spark Ignition	
Temperature Range	100°F – 190°F	
Temperature Stability	+/- 4°F	
Installation Location Ambient Temperature	40°F – 130°F	
Safety	Flame Rod, Thermal Fuse, Overheat Prevention Device, Fan Speed Monitor, Flue Temperature Monitor, Blocked Vent Detector, Dual Flame Sensing	
Water Pressure Min / Max (PSI)	30 / 160	
NG/LP Minimum Dynamic Gas Pressure (Full Fire)	2.5" (non-corrugated, black iron)	
NG/LP Maximum Static Gas Pressure	14"	
Gas Pressure for Adjustments	8" for NG, 11" for LP	
Electrical	120V AC, 60 Hz	
Power Consumption	Max 13 Amps, 24W (Standby)	Max 17 Amps, 32W (Standby)
Internal Water Volume (Gallons)	3	4
<b>Features and Approvals</b>	<b>CT-750</b>	<b>CT-1000</b>
4 Unit Cascaded High Turndown	100:1	133:1
Built-In Redundancy	Multiple Heat Exchangers with Individual Control	
Cascading	Masterless, 4 units, Automatic Rotation	
Common Venting	Yes, Up to 4 units	
Heat Exchanger	Expandable, Stainless 316L	
Appliance Certification to ANSI Z21.10.3	ETL	
SCAQMD	Ultra Low NOx (under 20 ppm)	
ASME	HLW	
<b>Performance GPM</b>	<b>CT-750</b>	<b>CT-1000</b>
Hot Water Capacity (45°F Rise)	31.4	41.6
Hot Water Capacity (70°F Rise)	20.2	26.7
Hot Water Capacity (90°F Rise)	15.7	20.8
Hot Water Capacity (100°F Rise)	14.1	18.7
Hot Water Capacity (140°F Rise)	10.1	13.4
Warranty (With Recirculation)	Heat Exchanger Coil – 6 years, Parts – 1 year	

**CT-750 / CT-1000 Technical Specifications – Due to HTP's policy of continuous product improvements, design and technical Specifications are subject to change without notice.**

### CT-750 Pressure Drop



### CT-1000 Pressure Drop



Pressure Drop through the Water Heater

# CT-750 / CT-1000

