

WAIWELA

**28C
SERIES**

HIGH VOLUME
COMMERCIAL
GAS TANKLESS
WATER HEATER



FREE

LIFETIME TECHNICAL SUPPORT
1.800.605.6542

EASY INSTALLATION

- WITH TANKLESS INSTALLATION VALVES (TIV)
- COMPACT WALL-MOUNTED DESIGN SAVES VALUABLE FLOOR SPACE
- VERSATILE VENTING

HIGHER STANDARDS

- LOW NOx EMISSIONS
- SAFETY ENGINEERED
- ENERGY EFFICIENT
- BUILT-IN DIAGNOSTICS & USAGE RECORD

APPLICATIONS

- JETTED BATH TUBS
- SHOWER SYSTEMS
- RESTAURANTS
- LAUNDROMATS
- CAR WASH

ENERGY EFFICIENCY

- 84% EFFICIENCY RATING; DOE ENERGY FACTOR OF 0.82.
- USES ENERGY ONLY WHEN HOT WATER IS DEMANDED.

SAFETY ENGINEERING

WAIWELA'S 28C SERIES INCLUDES SAFETY ENGINEERING NOT FOUND ON OTHER BRANDS, SUCH AS:

- **ICAD™:** OUR PROPRIETARY SAFETY SYSTEM THAT CONSTANTLY MONITORS COMBUSTION FOR EVIDENCE OF UNSAFE CARBON MONOXIDE (ON ALL INDOOR AND DIRECT VENT MODELS).
- **OVERHEAT LIMITER WRAP:** RESIN FILM SURROUNDS THE COMBUSTION CHAMBER, DETECTING OVERHEATING.
- **FLAME FAILURE SAFETY MONITOR:** FLAME RODS ENSURE PROPER FIRING AND DETECT FLAME FAILURE.
- **ANTI-BOIL PROTECTION:** TEMPERATURE SENSOR.
- **FREEZE PROTECTION TO -30°F**

MULTI-UNIT SYSTEMS

- **MIC-180 MANIFOLD CONTROLLER:** ELECTRONICALLY CONTROLS OPERATIONS IN MULTI-UNIT SYSTEMS OF 2 TO 6 UNITS AND ACCURATELY CALIBRATES FIRING, TEMPERATURE AND VOLUME OUTPUT OF EACH UNIT IN THE SYSTEM.
- **MICS-180 EXPANSION BOARD:** FOR 7 TO 10 UNITS. INSTALLS IN THE MIC-180 CABINET.
- **1 TO 20 UNIT SYSTEMS** WITH 199,900 TO 3.99 MILLION BTU/HR INPUTS.
- **COMMUNICATION BOARD** DISTRIBUTES HEATING LOAD TO MAXIMIZE SYSTEM LIFE.
- **UNITS CAN BE SERVICED** WITHOUT "BRINGING DOWN THE SYSTEM."
- **DUONEX CABLE:** INSTALL 2 PH28C TANKLESS WATER HEATERS TOGETHER IN A PARALLEL PLUMBING APPLICATION FOR 2X THE PERFORMANCE. (MIC-180 NOT REQUIRED)

HOT WATER PERFORMANCE* (ONE UNIT)

| TEMPERATURE RISE (°F) | 35 | 45 | 50 | 60 | 70 | 77 | 80 | 90 | 100 |
|-----------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| GALLONS PER MINUTE | 8.5 | 7.4 | 6.6 | 5.5 | 4.7 | 4.3 | 4.1 | 3.7 | 3.3 |
| GALLONS PER HOUR | 510 | 444 | 396 | 330 | 282 | 258 | 246 | 222 | 198 |

*ABOVE ESTIMATES ARE FOR SIZING PURPOSES ONLY



To determine multi-unit system output :
(GPM) * (# of Units) = total system output
or GPH

Examples:

2 Units : (4.7 GPM) * (2) = 9.4 GPM

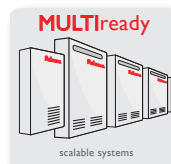
6 Units : (4.7 GPM) * (6) = 28.2 GPM

12 Units : (282 GPH) * (12) = 3,384 GPH

WAIWELA PH28C SERIES TANKLESS WATER HEATERS WERE USED IN THE LARGEST TANKLESS SYSTEM IMPLEMENTED IN NORTH AMERICA!

COMMERCIAL WARRANTY

- 5 YEAR LIMITED WARRANTY ON HEAT EXCHANGER
- 5 YEAR LIMITED WARRANTY ON PARTS
- 1 YEAR LIMITED WARRANTY ON SERVICE



28C
SERIES

WAIWELA

Gas Tankless Water Heater

SPECIFICATIONS

MODELS AND VENTING



INDOOR

NATURAL GAS
PH-28C IFSN
PROPANE
PH-28C IFSP



OUTDOOR

NATURAL GAS
PH-28C OFN
PROPANE
PH-28C OFP



INDOOR DIRECT VENT SEALED COMBUSTION

NATURAL GAS
PH-28C DVSN
PROPANE
PH-28C DVSP

| | |
|---|--|
| BTU INPUT RANGE | 19,000 ~ 199,900 (FULLY MODULATING) |
| MAXIMUM HOT WATER OUTPUT | 8.5 GPM (35° RISE AT 30 PSI) |
| MINIMUM FLOW FOR IGNITION | 0.66 GPM |
| DIMENSIONS (INCHES) | 14 7/8 (W) X 25 3/8 (H) X 11 1/8 (D) |
| WORKING WATER PRESSURE | 14 ~ 150 PSI |
| TEMPERATURE RANGE | 100 ~ 180°F |
| GAS CONNECTION | 3/4" NPT FEMALE (WITH INCLUDED GAS SHUTOFF VALVE) |
| WATER CONNECTION | 3/4" NPT MALE |
| EFFICIENCY RATING | 84% |
| DOE ENERGY FACTOR | 0.82 |
| GAS INLET PRESSURE (INDOOR AND OUTDOOR MODELS) | NATURAL GAS: MIN 4.0" W.C.; MAX. 10.5" W.C. LP GAS: MIN. 8.0" W.C.; MAX 14.0" W.C. |
| GAS INLET PRESSURE (DIRECT VENT MODEL) | NATURAL GAS: MIN 4.5" W.C.; MAX. 10.5" W.C. LP GAS: MIN. 10.0" W.C.; MAX 14.0" W.C. |
| LOW NOX COMPLIANT | YES (SCAQMD RULE 1146.2) |
| ELECTRICAL REQUIREMENT | 120 V/60 Hz AC, 2 AMPS MAX W/ FREEZE PROTECTION |
| POWER CORD (EXCEPT OUTDOOR) | 10-FOOT, 3-PIN INDOOR POWER CORD (PRE-INSTALLED) |
| FREEZE PROTECTION | (-30°F) INCLUDING WINDCHILL FACTOR |
| CONTROLLER/DIAGNOSTIC DISPLAY | UMC-117 (INCLUDED) |
| ELECTRONIC MANIFOLD READY? | YES: 2 TO 20 UNITS (USE MIC-180 CONTROLLER) |
| DUONEX™ READY? | YES: 2 UNITS WITH DUONEX™ CABLE |
| GAS SHUTOFF VALVE | INCLUDED |
| VENT REQUIREMENT (INDOOR/DIRECT VENT) | 4" CATEGORY III STAINLESS STEEL VENTING REQUIRED |
| VENT MAXIMUM LENGTH | 37.5 FEET (WITH THREE 90° ELBOWS) |
| AIR INTAKE (DIRECT VENT) | 4" STAINLESS STEEL, PVC, ABS OR ALUMINUM |
| NET WEIGHT | 55 LBS. |

FEATURES

- ENDLESS HOT WATER ON DEMAND
- ENERGY-SAVING DESIGN: HEATS WATER ONLY WHEN NEEDED
- MODULAR EXPANDABILITY
- UNMATCHED SAFETY ENGINEERING
- PROPRIETARY ICAD™ SAFETY SYSTEM (ON INDOOR AND DIRECT VENT MODELS)
- PROPRIETARY FILM WRAP OVERHEAT LIMITER (ON HEAT EXCHANGER)
- BUILT-IN DIAGNOSTICS & USAGE RECORDS
- INCLUDES DIGITAL CONTROLLER TO SET TEMPERATURE AND ACCESS DIAGNOSTICS
- POWER RETURN: AUTO-ON AT LAST SETTING AFTER POWER INTERRUPTION
- CAN BE USED IN CIRCULATION SYSTEMS UP TO 140°F
- SUPPORTS BOTH VERTICAL AND HORIZONTAL VENTING

ACCESSORIES

- **USC1-117** FIRST BATH CONTROLLER
- **USC2-117** SECOND BATH CONTROLLER
- **DUONEX™** CABLE FOR 2-UNIT SYSTEM
- **PIPE COVER**
- **RECESSED BOX** (OUTDOOR MODEL)
- **MIC-180** CONTROLLER FOR 2 TO 6 UNIT SYSTEMS
- **MICS-180** EXPANSION BOARD FOR 7 TO 20 UNIT SYSTEMS
- **MIC COMMUNICATION CABLE:** 16 FOOT, 32 FOOT, 65 FOOT LENGTHS
- **HIGH ALTITUDE** ADJUSTMENT CHIPS
- **SPECIAL VENT TERMINATIONS**
- **TIV** TANKLESS INSTALLATION VALVES
- **UN-CLOG-IT** DESCALING KIT

IN THE BOX

- ONE WAIWELA TANKLESS UNIT
- ONE DIGITAL CONTROLLER
- ONE GAS SHUTOFF VALVE
- ATTACHED 10FT. POWER CORD (INDOOR AND DIRECT VENT MODELS)
- OPERATING/INSTALLATION MANUAL

AVAILABLE LOCALLY AT:

THE WAIWELA STORY

WAIWELA* IS PROUD TO BE AFFILIATED WITH PALOMA INDUSTRIES, LTD. WAIWELA IS REPRESENTED BY EFFICIENT TECHNOLOGY SALES, LLC (ETS) IN THE USA & CANADA. WITH OVER 30 YEARS OF TANKLESS EXPERIENCE, WE ARE DEDICATED TO PROVIDING OUR CUSTOMERS WITH PRODUCTS HIGH IN COMFORT, ECONOMY, EFFICIENCY AND RELIABILITY.

PALOMA WAS THE FIRST GAS TANKLESS WATER HEATER MANUFACTURER TO ENTER THE U.S. MARKET MORE THAN 30 YEARS AGO, AND CONTINUES TO BE THE LEADER IN THE DEVELOPMENT OF SAFE GAS TECHNOLOGY.

* PRONOUNCED "Vi VELA" - HAWAIIAN FOR "HOT WATER"



FOR MORE INFORMATION, VISIT WWW.WAIWELA.COM OR CALL 800.605.6542

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