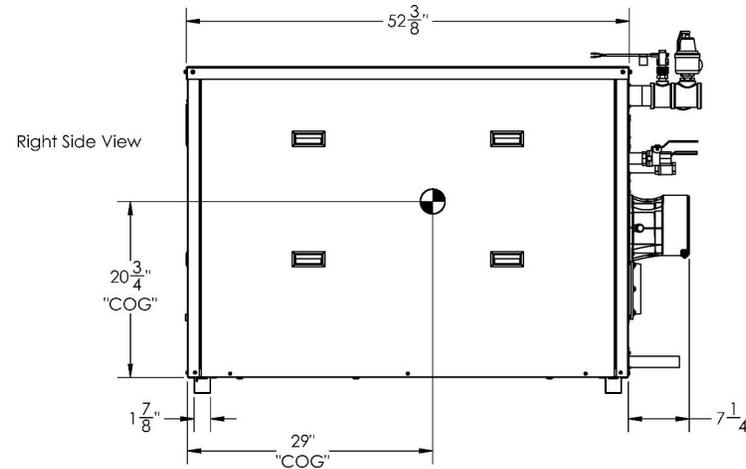
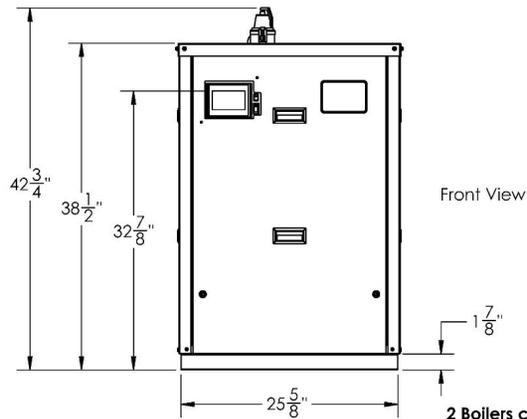
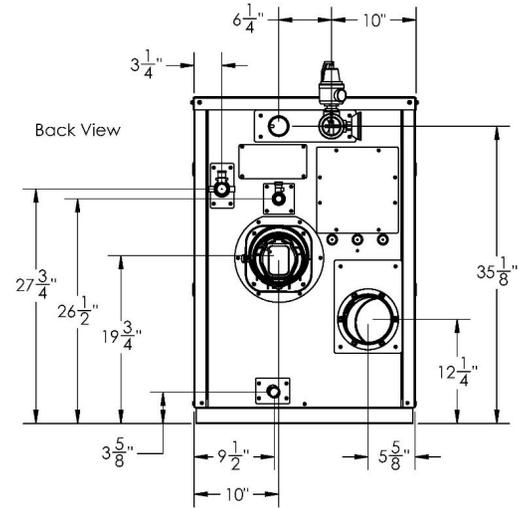
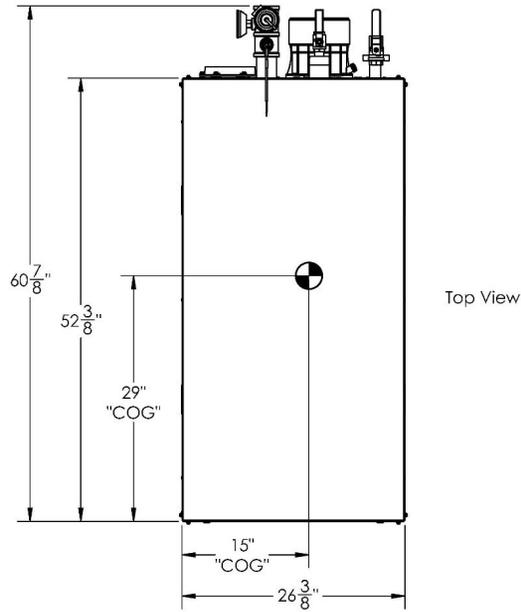




# Boiler SUBMITTAL DATA SHEET



2 Boilers can be stacked vertically with included bracket kit.



783 N Chili Ave | Peru, IN 46970

## BFIT-1000 C

Appliance Certified for use as Boiler or DHW

Boiler Technology Leadership Since 1916  
HOT WATER SYSTEMS

[www.bryanboilers.com](http://www.bryanboilers.com)

Updated 2/24/26

ABC260201



# Boiler SUBMITTAL DATA SHEET

RATINGS AND CAPACITIES		
Input - Low fire:	100,000	BTU/HR
Input - High Fire:	999,000	BTU/HR
Output - High Fire:	969,000	BTU/HR
Boiler Horsepower:	29	BHP
Recovery Rate(based on 100°F temperature rise):	1,187	Gallons Per Hour (GPH)
Thermal / Combustion Efficiency %:	97	
Heating Surface:	75	Sq.Ft.
Water Vol. (gal):	8	Gallons
Fuel:	<b>Natural Gas or LP</b>	
Firing Rate:	<b>Full Modulation</b>	
Burner Turndown:	10:1	
Low NOx Emissions:	<10 ppm	
Inlet Gas Pressure (NG):	<b>4" (Min.) / 14" (Max.)</b>	
Inlet Gas Pressure (LP):	<b>8" (Min.) / 14" (Max.)</b>	
Approx. Shipping Weight (lb):	600	lbs.

ASME Section IV (Max 160 PSIG / 210°F)  
 Setpoint range is 60-185°F  
 Adjustable, manual reset high limit setting of ≤ 200°F.  
 ASME H stamp MAWT is 210°F for the vessel. (For max setpoint, see Setpoint range.)  
 ETL Certified to ANSI Z21.13 / CSA 4.9 & ANSI Z21.10.3 / CSA/4.3  
 ETL Certified to UL 795 / CSA 3.1 & NSF / ANSI Standard 372



DIMENSIONS / CONNECTIONS		
Height:	38 1/2	(Note 1)
Width:	25 5/8	(Note 2)
Length:	52 3/8	(Note 3)
Water Outlet Pipe (FNPT):	2	
Water Inlet Pipe (MNPT):	2	
Vent Connection:	6	
Air Intake Connection:	6	
Condensate Drain (PVC):	1	
Drain Line Connection:	3/4	
Gas Inlet Connection (FPT):	1	

FLOWS AND PRESSURE DROPS		
Delta T	Flow (GPM)	Head Loss (ft)
20°	97	14.6
30°	65	7.2
40°	49	4.4

Electrical Requirements: (Appliance Only)				
Model	Voltage	Phase	Hz	Max. Amp Draw
400	120	1	60	7
500				7
650				8
800				8
1000				8
1250-1500				10

BOILER ALTERNATIVE RELIEF VALVE KITS (75 PSI STD.)			
<input type="checkbox"/>	30 PSI	<input type="checkbox"/>	100 PSI
<input type="checkbox"/>	50 PSI	<input type="checkbox"/>	125 PSI
<input type="checkbox"/>	60 PSI	<input type="checkbox"/>	150 PSI

Water Heater T&P Relief Valve Kits		
<input type="checkbox"/>	125 PSI	
<input type="checkbox"/>	150 PSI	

- | NOTES:  |
|---|
| 1. Height dimension is from floor to top of jacket. |
| 2. Length is from jacket front to jacket rear.      |
| 3. Dimensions shown are for reference only          |
| 4. Refer to manual for gas supply piping charts     |



# Boiler SUBMITTAL DATA SHEET

## STANDARD EQUIPMENT

### PRESSURE VESSEL DESIGN

Stainless Steel Heat Exchanger  
 ASME Section IV Certified, "H" Stamp  
 MAWP 160 PSIG & Max Temp 210°F  
     Setpoint range is 60-185°F  
     Adjustable, manual reset high limit setting of ≤ 200°F.  
     ASME H stamp MAWT is 210°F for the vessel. (For max setpoint, see Setpoint range.)  
 Ten Year Limited Pressure Vessel Warranty

### COMBUSTION DESIGN

Stainless Steel Pre-Mix Burner  
 Low NOx Emissions ( < 10 ppm)  
 Full Modulation, 10:1 Turndown  
 Natural Gas or Propane  
 4" wc (8" wc Propane) to 14" wc inlet gas pressure  
 Direct Spark Ignition System  
 High/Low gas pressure switches, manual reset  
 Variable Speed Combustion Blower  
 Blocked Vent Switch

### VENTING

Category II or IV Venting  
 Individual or Common (Engineered) Vent System  
 Vertical or Horizontal  
 3-in-1 Vent Connector: Accepts CPVC, PP or Stainless Steel  
*NOTE: PVC venting requires CPVC Vent kit; Consult I&O Manual.*  
 Includes built-in vent gas sensor test port  
 Direct Vent & Sealed or Room Air or Outdoor Ready  
 Outdoor installations require the optional outdoor exhaust vent kit

\* Flue system material shall be capable of continuous operation at 210°F or higher and shall be certified to UL 1738 – venting system for gas-burning appliances cat II, III and IV.

### APPLIANCE EQUIPMENT

Indoor / Outdoor Construction (Field Convertible)  
 Stainless steel water piping suitable for boiler or domestic (potable) water applications  
 Concert™ Control (24 Vac)  
 High Limit Temp Control, Manual Reset  
 Low water cutoff, manual reset  
 Water Flow Switch  
 Supply & Return Water Temperature Sensors  
 Flue Gas Temperature Sensor  
 Condensate trap  
 Blocked Condensate Switch  
 Pressure & Temperature Gauge  
 ASME 75 PSI Relief Valve Standard (Available 30, 50, 60,100, 125 or 150 psig)  
 NOTE: Stacking Brace Kit (PN# 111405-00 included with all 400-1500 models. Kit includes 2 braces & 8 self-drilling screws.

NOTE: For stacking outdoor boilers, consult factory

### ELECTRICAL DESIGN

<b>Models 400-500</b>	-120 VAC Only	AMP Draw: 7.0 Amps
<b>Models 650-1000</b>	-120 VAC Only	AMP Draw: 8.0 Amps
<b>Models 1250-1500:</b>	-120 VAC Only	AMP Draw: 10.0 Amps

### 24VAC/5VDC - Low Voltage PCB

- EMS Communications  
 (Dual RJ45 Jacks for Peer-To-Peer or Modbus)
- Boiler Options (Sensors)
- Pumps (Boiler, DHW, System) & Auxiliary Devices



# Boiler SUBMITTAL DATA SHEET

## OPTIONAL EQUIPMENT

- Hydronic Kit (Boiler Circulation Pump, Pump Flange Kit and Condensate Neutralizer)
- Water Heater Pump (Circulation Pump & Pump Flange Kit)       4-12 GPG Water Hardness       12-15 GPG Water Hardness
- External High Limit Temperature Control, Manual Reset
- Condensate Neutralizer
- Supply Header Temperature Sensor:       Direct Immersion       Well Immersion (with Well)
- Outdoor Air Temperature Sensor (Wired)
- Domestic Hot Water Sensor with Well Kit
- EMS Signal Converter Kit (Converts Energy or Building Management System 0-10v signal to 4-20mA)
- Alarm Buzzer with Silencing Switch
- PVC /CPVC Vent Kit       PN# 111569-01, Sizes 400-500       PN# 111569-02, Sizes 650-1000       PN# 113404-01, Sizes 1250-1500
- Outdoor Vent Kit       PN# 110644-01, Sizes 400-500       PN# 110645-01, Sizes 650-1000       PN# 113442-01, Sizes 1250-1500 (8")
- Universal Communications Gateway       BACnet, Metasys N2, Modbus       LonWorks
- Conductor Sequencing Panel       Optional Isolation Relay Board

The Conductor manages multiple condensing & non-condensing, small & large heat output, new and/or existing boilers (full modulation or on-off), and steam or hot water applications. It helps improve system efficiency by selecting and modulating the right boiler to match operating conditions. The Conductor offers a single point boiler plant Energy Management System (EMS) interface including Modbus TCP/IP, Modbus RTU RS485, BACnet/IP and BACnet MSTP standard. If LonWorks needed, add for the separate LonWorks gateway.

- Water Heater Storage Tank      Model: \_\_\_\_\_      Size: \_\_\_\_\_

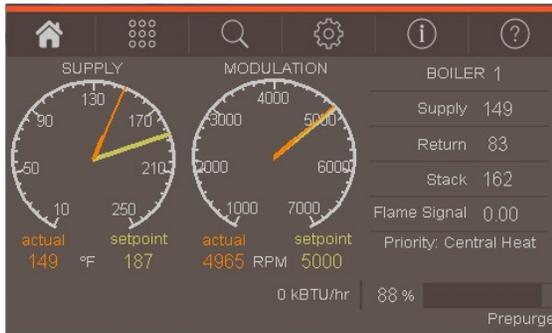
## EXTENDED WARRANTY

- 3-Year Parts
- 5-Year Parts
- 10-Year Parts
- 5-Year Parts/Labor
- 10-Year Parts/Labor



# Boiler SUBMITTAL DATA SHEET

## CONCERT CONTROL FEATURES



### **Dashboard - Color Touchscreen Display, 4"**

- Intuitive Icon Navigation
- "Quick" Setup Menus
- \*Real Time BTU/H Display

### **Two (2) Temperature Demand Inputs**

- Outdoor Air Reset Curve for Each Input
- Time of Day Setback Capability  
(Envirocom Thermostat must be installed)

### **Three (3) Pump Control**

- Boiler Pump With On/Off or Variable Speed Control
- Domestic Hot Water (DHW) Pump
- System Pump
- Alternative Control to Combustion
- Air Damper or Standby Loss Damper
- Pump Overrun for Heat Dissipation
- Pump Exercise
- Pump Rotor Seizing Protection

### **Peer-to-Peer Boiler Communications**

- Multiple Size Boiler Sequencing Up to 8 Units
- \*Two (2) Boiler Start/Stop Trigger
- Lead Boiler Automatic Rotation

### **Energy Management System (EMS) Interface**

- \*Firing Rate and Water Temperature Based
  - Algorithms for Multiple Boilers; loss of EMS signal defaults to local boiler settings
- 420mAdc Input/Output (010Vdc Optional Converter)
- ModBus Input/Output (BACnet or LonWorks Optional Gateway)
- Simultaneous Interface with Peer-to-Peer

### **USB Data Port Transfer**

- Upload Settings Between Boilers
- Download Parameters for Troubleshooting
- Import Data into .CRV Formatted Files for Performance Analysis

\* Unique to Concert

### **Energy Efficiency Enhancer**

- Anticycling Technology
- Multiple boiler base load common rate
- Outdoor Air Temperature Reset Curve
- Warm Weather Shutdown
- Boost Temperature & Time
- Ramp Delay
- Overtemperature Safeguarding

### **Self-Guiding Diagnostics**

- Identifies Fault
- Describes Possible Problems
- Provides Corrective Actions
- Time/Date Stamp on Alarms and Lockouts

### **Unmatched Archives**

- Historical Trends Collects Up to 4 months Data
- Event History Up to 3000 Alarms, Lockouts and Cycle & Run Times
- Alarm Limit String Faults, Holds, Lockouts and Others
- Cycle & Run Time Boilers & Pumps
- Resettable (Lockouts/Alarms/Cycles & Run Time)

### **Domestic Hot Water Priority**

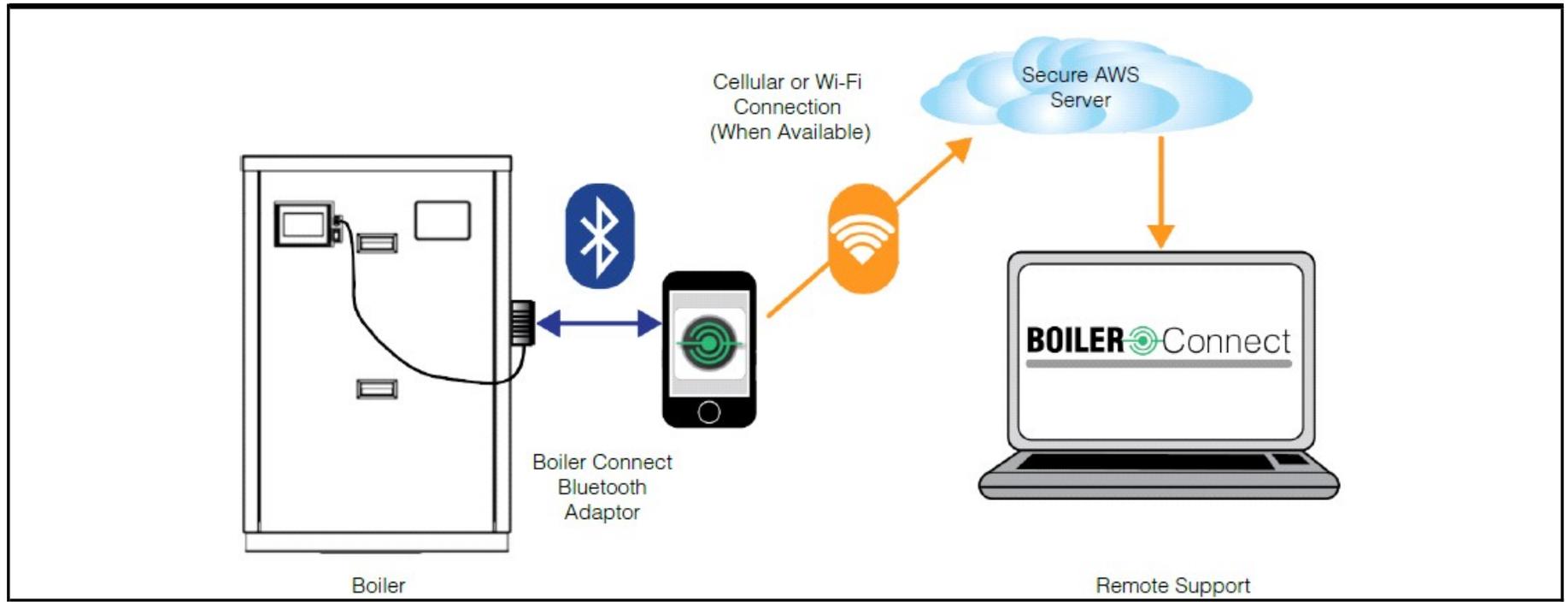
- DHW Tank Piped With Priority in the Boiler Loop
- DHW Tank Piped as a Zone in the System With the Pumps Controlled by the Concert Control
- DHW Modulation Limiting
- Status Screens
- Sensor Monitoring and Control

### **Other Features**

- Factory Default Settings
  - Three Level Password Security
  - Frost Protection
- Contractor Contacts (Up to 3)
- Low Water Flow Safety Control & Identification
- Proportional Integral Derivative (PID) Parameters for Central Heat, DHS, Sequencer and Fan

### **Boiler Connect Compatible**

Requires one (1) Boiler Connect Bluetooth Adapter Kit (PN# 113329-01) per install or cascade)



## BOILER Connect

### BOILER CONNECT FEATURES

- Bluetooth adapter connects to the Boiler Connect App
- English or Spanish language
- Start-up, Troubleshooting Tips and Service Wizards
- Data logs, Service and Status Reports sent to the cloud
- Live Data Sharing (Cellular Service Required) with Technical Service Representative