



# PLN-Mini™ Ultra-Low NOx Package Burner

## Lower Emissions and Advanced Technology.

Zeeco's PLN-Mini Ultra-Low NOx Package Burner utilizes surface stabilized combustion to achieve low-NOx emissions without the use of Flue Gas Recirculation (FGR). The burner is ideal for firetube boilers, cast iron boilers, condensing boilers, and for generating heat and steam in commercial, institutional, and light industrial applications. The PLN-Mini burner delivers dramatically lower emissions and engineering technology that can only come from the global authority in combustion and environmental solutions—Zeeco.

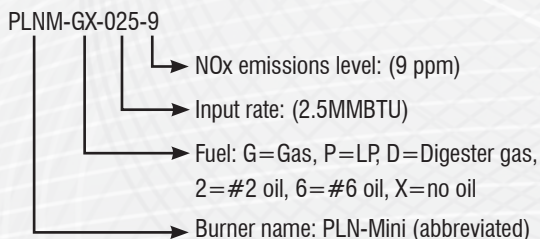
## Burner Features and Benefits

- Compact and versatile design for easy installation
- Safe, reliable, easy to set up, simple to maintain
- NOx reduction using Surface Stabilized Combustion
  - 30 ppm (58mg) NOx with 45% excess air levels, No FGR
  - 9 ppm (17mg) NOx with 60% excess air levels, No FGR
- Fires natural gas and propane gas
- Quiet operation with typical noise levels below 85dBA
- Complete integrated system with automatic flame monitoring and shut-off, control panel, fuel control and combustion air fan
- Integrated PWM signal input for full speed air modulation

## Standard Equipment

- Blower/Motor
- Burner Management System (BMS) Siemens LMV3 or AutoFlame Mini Mark 8
- NEMA 1 Integrated Control Panel with Power On switch and indicator lights for power, pilot, main flame, and flame failure
- Parallel Positioning System with fuel actuators
- Fuel control (BV) valves with servo motors
- Air control via PWM signal
- Combustion Air Proving Switch
- Air Filter Proving Switch
- Ignition Transformer with direct spark ignition assembly
- Hinged Blast Tube
- Air Inlet Filters
- Main Fuel Train - includes ventless regulator, ventless dual block main gas shutoff valves, high and low pressure switches, two manual gas valves

### Burner Model Naming Convention



### Burner Selection

✓ Standard  
o Optional

Burner Model	Frame Size	Burner Size MMBTU	Turndown Gas	BMS System Standard	Scanner	
					UV	IR
PLNM-GX-005-60 PLNM-GX-010-60 PLNM-GX-015-60	1	0.5 1.0 1.2	4-1	LMV36	✓	o
PLNM-GX-017-60 PLNM-GX-020-60 PLNM-GX-025-60	2	1.5 2.0 2.2	6-1	LMV36	✓	o



BURNERS



FLARES



INCINERATORS



PARTS & SERVICE

# PLN-Mini™ Ultra-Low NOx Package Burner

Burner model: PLN-Mini  
 Heat release range: 0.5 MMBtu/hr to 2.2 MMBtu/hr (0.73 MW to 18.5 MW)  
 Fuel Gas: Natural Gas, LPG, or other upon request  
 Turndown: up to 6:1  
 Excess air range: 35% to 60%  
 Expected emissions levels: 40ppm (77mg) NOx at 40% excess air  
   30ppm (58mg) NOx at 45% excess air  
   15ppm (29mg) NOx at 50% excess air  
   9ppm (17mg) NOx at 60% excess air  
 Mounting options: Horizontal, Vertical, Up, or Down Firing



### Burner Selection

Burner Model	Burner Size			Boiler		Blower Motor HP	Furnace Pressure		Standard Gas Train Size	Required Min Gas	
	Frame Size	MMBTU HHV	MW/h LHV	HP 80% Eff.	ton/h 90% Eff.		[inch W.C.]	[mBar]		Pres. [PSI]	Pres. [mBar]
PLNM-GX-005-60	1	0.5	0.13	12	0.19	0.5	1	2	1.5	0.15	10
PLNM-GX-010-60		1.0	0.26	24	0.38	0.5	1	2	1.5	0.15	10
PLNM-GX-015-60		1.2	0.31	29	0.46	0.5	1	2	1.5	0.15	10
PLNM-GX-017-60	2	1.5	0.39	36	0.57	0.75	1	2	2	0.15	10
PLNM-GX-020-60		2.0	0.52	48	0.76	0.75	1	2	2	0.15	10
PLNM-GX-025-60		2.2	0.57	52	0.84	0.75	1	2	2	0.15	10

ZEECO® combustion and environmental solutions are designed and manufactured to comply with applicable local and international standards as defined by our customers.



REGISTERED ISO 9001: 2008

CERTIFICATION APPLIES TO ZEECO HEADQUARTERS ONLY.

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