T-2 METASYS[®] INTERFACE

B6000 BMS to Johnson Controls Metasys Gateway

The T-2 Metasys Interface provides certified compatibility for data sharing and program access between the Raypak B6000 Boiler Management System and the Johnson Controls Metasys Building Management System. The T-2 utilizes a ProSoft 1500 series communications interface to facilitate low level translation between the proprietary Raypak RS-485 protocol and Johnson Controls' open architecture N2 protocol. The Raypak B6000 and Metasys systems seamlessly fuse to provide a level of boiler control and monitoring capability unparalleled by any other system at any price.

Features

- Certified N2 Metasys Compatibility
- Total B6000 BMS Program Access
- Boiler Activation/Shutdown
- Outdoor Reset Adjustment
- Setback Control
- Lead/Lag Scheduling
- Temperature Monitoring
- Boiler Fault Annunciation
- Complete Boiler Diagnostics
- Remote Troubleshooting
- All Attribute Read/Write Support
- Diagnostic LED Indicators
- Data Integrity Assurance
- 9600 Baud Data Transfer Rate
- Single Source Accountability



DOOR CLOSED



DOOR OPEN

Raypak, Inc. reserves the right to make product changes or improvements at any time without notification.

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T-2 Metasys Interface

Interface Board

Certified Metasys Compatibility ProSoft Series 1500 Translator RS-485 to N2 Gateway 9600 Baud Transfer Rate

Read/Write Attributes

Analog/Binary
Total B6000 BMS Program Access

Data Integrity Protocol

Summation/Modulus Error Checking Auto Command Error Feedback

LED Diagnostic Indicators

Port 1 Port 2

Green - Active Green - Active Red - Error Red - Error

Electrical Characteristics

120 VAC, 0.25A, 60 Hz

Ambient Conditions

Temperature: -40 to 175°F

Humidity: 90% RH Non-condensing

Enclosure

Heavy Gauge Steel Lockable Access Door Tamper Resistant Design 15 3/16" L x 8" W x 4 3/4" D Boiler or Remote Mounted

Limited One-Year Warranty



Sample Specification

Section I: General Requirements

- 1. Provide a Raypak T-2 Metasys Interface that shall facilitate low level data translation between the Raypak B6000 Boiler Management System and the Johnson Controls Metasys Building Management System.
- 2. The interface shall be microprocessor based.
- 3. The interface shall be UL Listed.
- 4. The interface shall carry a one-year limited warranty against failure caused by defective workmanship or material.
- 5. The interface and boiler control system shall be manufactured by the same company and shall carry single source accountability.

Section II: Equipment Enclosure

- 1. The interface enclosure shall be constructed of heavy gauge steel and shall be protected with a baked-on UV inhibited Polytuf powdercoat finish.
- 2. The front access door of the interface enclosure shall be lockable and the enclosure shall be tamper resistant.

Section III: Control Functions

- 1. The interface shall provide seamless communications integration between the Raypak B6000 RS-485 and the Metasys N2 communications protocols.
- 2. The interface shall utilize summation/modulus error checking and auto command error feedback to ensure data integrity.
- 3. The interface shall allow analog and binary multi-level read/write Metasys capabilities for the following B6000 functions:
 - a) Reset parameters including: Setpoint, Reset Ratio, Temperature Rise and Control Band.
 - b) Outdoor cutoff parameters including: Outdoor Cutoff Temperature and Outdoor Cutoff Deadband.
 - c) Secondary operating parameters including: Firing Step Increment, Pump Turn-Off Delay and Ignition Lockout Time.
 - d) Setback parameters including: Setback Period Scheduling and Setback Activation.
 - e) Lead-lag parameters including: Lead Boiler Assignment and Time Rotation Interval.

Section IV: Display Functions

- 1. The interface shall have port active and error diagnostic lights for both interface ports.
- 2. The interface shall allow analog and binary multi-level read-only Metasys capabilities for the following B6000 functions:
 - a) Current temperatures including: Water Temperature, Outdoor Air Temperature, and Target Temperature.
 - b) Boiler operating status including: Valve Position, and Current Firing Rate.
 - c) Fault indication including: Low Water, Low Gas Pressure, High Gas Pressure, High Temp, Low Water Pressure, Low Flow, No Pilot and Manual Override Status.
 - d) Secondary operating parameters including: Time Remaining Till Lead Boiler Rotation and Valve Operating Times.