CARNES®

SPECIFICATION SHEET
"H" Series Steam Humidifiers
CARNES®Link Communication Protocol

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CarnesLink offers you the ability to monitor and control your Carnes humidifier(s) ("H" Series and newer) by allowing the humidifier(s) to link to your Building Management System (BMS). CarnesLink uses a communication chip that is factory installed on our "True Touchscreen" circuit board, mounted internally inside your Carnes humidifier(s) cabinet. CarnesLink communication protocols include BACnet® (MS/TP), Modbus® (RTU), Metasys® (N2), and Siemens® (FLN).
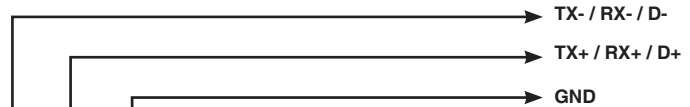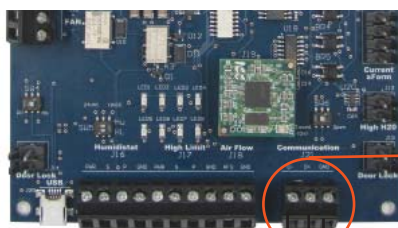
CarnesLink features include:
- Remotely monitor up to 29 humidifier functions
- Adjust Carnes humidifier(s) settings remotely
- Remotely turn on/off and drain the unit(s) & monitor cylinder life counter
- Control board has a conformal coating, protecting electronic components on the board from: moisture, extreme temperatures, and corrosion.

CarnesLink connections must be made between the main humidifier and the Building Management System, and between the main humidifier and any slaves that are present, such as our dual cylinder humidifier units. These connections are made through the Building Management System to terminals D-, D+, and GND on the CarnesLink circuit board's J21 communication connection.

Protocol	Signal Type	Recommended Cable	Polarity		Max. Distance of Wire Run
			Data- (D-)	Data+ (D+)	
BACnet® MS/TP	RS-485 Half Duplex	**Unterminated Networks** 18 to 24 AWG Recommended 120 Ohms (max.) **Terminated Networks** 20 to 22 AWG (for runs up to 1000 ft. ~300 meters) Recommended 120 Ohms (max.)	Net-	Net+	**Unterminated** 1000 ft. ~300 meters **Terminated** 4000 ft. ~1200 meters
Modbus® RTU	RS-485 Half Duplex	**Terminated Networks** 16 to 20 AWG (for runs up to 4000 ft. ~1200 meters) Recommended 120 Ohms (max.)	Net-	Net+	**Unterminated** 1000 ft. ~300 meters **Terminated** 4000 ft. ~1200 meters
Metasys® N2	RS-485 Half Duplex	18 to 24 AWG Recommended Shielded, Twisted Pair 120 Ohms (max.)	TX- RX-	TX+ RX+	2000 ft. ~600 meters
Siemens® FLN	RS-485 Half Duplex	18 to 24 AWG Recommended Shielded, Twisted Pair 120 Ohms (max.)	D-	D+	2000 ft. ~600 meters

Single Humidifier

To Building Management System

TX- / RX- / D-

TX+ / RX+ / D+

GND

Dual Unit Humidifier or Humidifiers Connected in Series

SUPERSEDES 16865   16865-A