



ECB-STAT-RT AND ECB-STAT-HP SERIES

PROTOCOL IMPLEMENTATION CONFORMANCE STATEMENT (PICS)

LAST REVISION: SEPTEMBER 14, 2010

Vendor Name: Distech Controls
Product Name: ECB-STAT-RT and ECB-STAT-HP Series
Product Model Number: ECB-STAT-RT1, ECB-STAT-RT2,
 ECB-STAT-HP, ECB-STAT-RT2E,
 ECB-STAT-RT2H, ECB-STAT-RT1P,
 ECB-STAT-RT2P, ECB-STAT-HPP,
 ECB-STAT-RT2EP, ECB-STAT-RT2HP
Product Version: 3.5.05
BACnet Protocol Revision: 2 (135-2001)

Product Description

The ECB-STAT-RT and ECB-STAT-HP series represent a thermostat family specifically designed for single stage and multi stage control of heating and cooling equipment such as rooftop, heat pump and self-contained units.

Every ECB-STAT-RT series thermostat model has an internal temperature sensor and some models offer relative humidity control. For more advanced applications, there are models that contain economizer control logic for proportional damper economizer actuators. With adjustable high and low balance points, heat pump or auxiliary heating can be limited based on outside air temperature on ECB-STAT-HP series thermostats. Moreover, when a thermostat is in “economy” mode, heat pump usage is maximized before auxiliary heating turns on. All thermostats can be equipped with an optional PIR motion detector cover for advanced occupancy functionality.

BACnet Standardized Device Profile (Annex L):

- BACnet Operator Workstation (B-OWS)
- BACnet Building Controller (B-BC)
- BACnet Advanced Application Controller (B-AAC)
- BACnet Application Specific Controller (B-ASC)
- BACnet Smart Sensor (B-SS)
- BACnet Smart Actuator (B-SA)

BACnet Interoperability Building Blocks Supported (Annex K):

| BACnet Interoperability Building Block | Supported |
|---|-------------------------------------|
| Data Sharing-ReadProperty-B (DS-RP-B) | <input checked="" type="checkbox"/> |
| Data Sharing-ReadPropertyMultiple-B (DS-RPM-B) | <input checked="" type="checkbox"/> |
| Data Sharing-WriteProperty-B (DS-WP-B) | <input checked="" type="checkbox"/> |
| Device Management-Dynamic Device Binding-B (DM-DDB-B) | <input checked="" type="checkbox"/> |
| Device Management-Dynamic Object Binding-B (DM-DOB-B) | <input checked="" type="checkbox"/> |
| Device Management-DeviceCommunicationControl-B (DM-DCC-B) | <input checked="" type="checkbox"/> |

Segmentation Capability:

Segmented Requests Supported Window Size: N/A
 Segmented Responses Supported Window Size: N/A

Standard Object Types Supported:

| Object Type | Supported | Dynamically Creatable | Dynamically Deletable | Optional Properties Supported | Writable Properties |
|-------------------|-------------------------------------|--------------------------|--------------------------|---|---|
| Analog Input | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Reliability | Out_of_Service |
| Analog Value | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Reliability | Present_Value ^a Out_of_Service ^a Object_Name ^b |
| Binary Input | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Reliability Active_Text Inactive_Text | Out_of_Service |
| Binary Value | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Reliability Active_Text Inactive_Text | Present_Value Out_of_Service |
| Device | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Max_Master Max_Info_frames | Object_Identifier Object_Name Max_Master |
| Group | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | N/A | N/A |
| Multi-state Value | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Reliability States_Text | Present_Value Out_of_Service |
| Schedule | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Weekly_schedule | Present_Value Weekly_Schedule |

a: Present_Value and Out_of_Service properties are writable for every AV objects except :

- PI Heating Demand (AV20)
- PI Cooling Demand (AV21)
- Economizer Output (AV23)

b: Object_Name property is writable for the following object only :

- Room_Temperature (AV7)

Data Link Layer Options:

- BACnet IP, (Annex J)
- BACnet IP, (Annex J), Foreign Device
- ISO 8802-3, Ethernet (Clause 7) (10Base2, 10Base5, 10BaseT, Fiber)
- ANSI/ATA 878.1, 2.5 Mb. ARCNET (Clause 8)
- ANSI/ATA 878.1, RS-485 ARCNET (Clause 8), baud rate(s):
- MS/TP master (Clause 9), baud rate(s): 9600, 19200, 38400, 76800 (Auto Baud)
- MS/TP slave (Clause 9), baud rate(s):
- Point-To-Point, EIA 232 (Clause 10), baud rate(s):
- Point-To-Point, modem, (Clause 10), baud rate(s):
- LonTalk, (Clause 11), medium:
- Other:

Device Address Binding:

Is static device binding supported? Yes No
(Necessary for two-way communication with MS/TP slaves and certain other devices.)

Networking Options:

| | |
|---|-----|
| Router | N/A |
| Annex H, BACnet Tunnelling | N/A |
| BACnet/IP Broadcast Management Device (BBMD) | N/A |
| Does the BBMD support registrations by Foreign Devices? | N/A |

Character Sets Supported:

- | | | |
|---|---|-------------------------------------|
| <input checked="" type="checkbox"/> ANSI X3.4 | <input type="checkbox"/> IBM/Microsoft DBCS | <input type="checkbox"/> JIS C 6226 |
| <input type="checkbox"/> ISO 10646 (ICS-4) | <input type="checkbox"/> ISO 10646 (UCS2) | <input type="checkbox"/> ISO 8859-1 |

If this product is a communication gateway, describe the types of non-BACnet equipment/networks(s) that the gateway supports:

Not applicable.