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Class 3200 BACnet MSTP Troubleshooting v08292016

1. Are all BACnet ID's (Device Instance) unique for each meter/device in the RS485 trunk?
2. Are all MAC Address's set and unique?
3. MAC Master set to 127 in all devices in the RS485 trunk?
4. Are the two Bias DIP switches S91 enabled? Both switches set to the left is on.
5. Every RS485 network is different and may require more or less bias generally every third EMon meter in the RS485 should have the two-position bias DIP-switches enabled.
6. DIP switch settings for BACnet MSTP, S2 has been set with switch 1 in OFF, switch 2 in OFF, switch 3 & 4 is ON & OFF respectively (for baud rate of 38.4K).
7. Are all the devices set to the same baud rate as the network?
8. Has a 120-Ohm resistor installed at the End of Line (furthest meter) and controller?
9. RS485 cable is 22 – 20 AWG Stranded with a shield?
10. Is shield connected to the case on controller, complete and floating through the RS485 trunk?
11. How many BACnet devices are on the RS485 trunk (32 max)?
12. Try the EMon E-Check communication utility to test communications. This requires a USB to RS485 converter key Honeywell EMon material number E10040.
13. Test the MSTP communications for one meter (not connected to the daisy chain or any other meter or devices) with EMon ECheck utility.
14. Front End set to read AI (Analog Input)?
15. Front End set to BACnet Vendor ID of 482 for EMon?
16. BACnet Standardized Device Profile (Annex L): BACnet Smart Sensor (B-SS)
17. Download the E-Check EMon communications utility at this link: Install E-Check Utility Download (4.3MB Zip Download) .

EMon RS485 Transceiver Type:

- ✓ Fail Safe
- ✓ Non-Isolated

EMon RS485 Transceiver Load:

- ✓ Unit Load: 0.47 (Unit Load = Transceiver Load + Local Bias Load)
- ✓ Transceiver Load 0.25
- ✓ Local Bias Load 0.22
- ✓ Local Bias resistance 54.9k Ohms