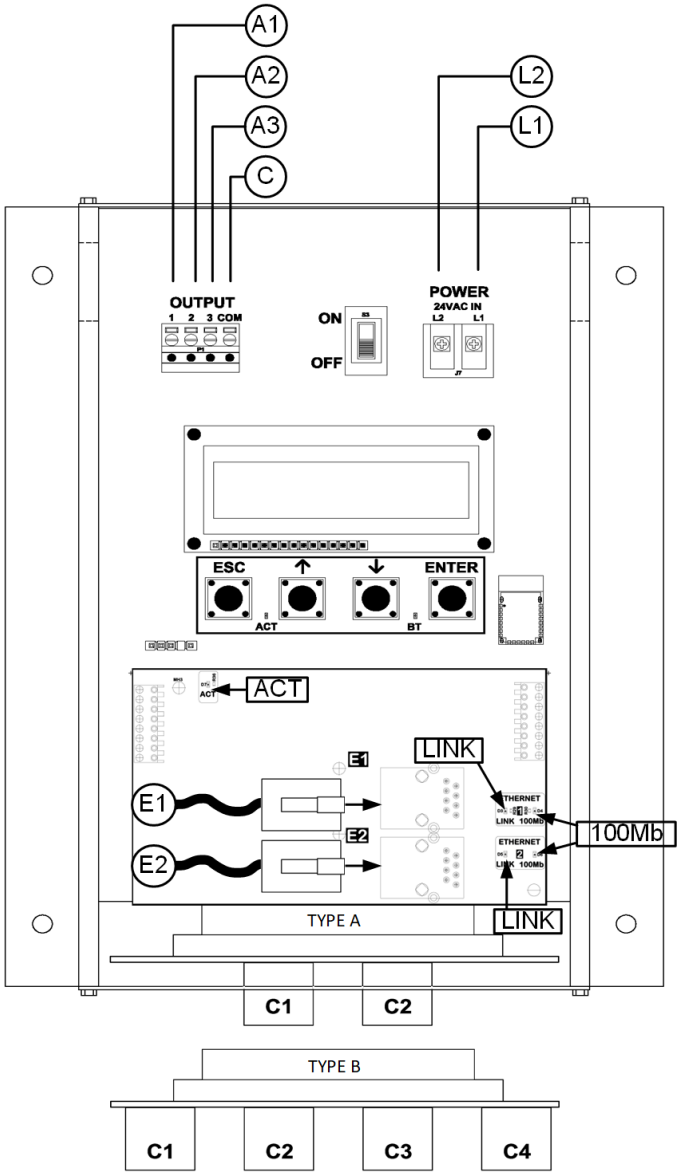
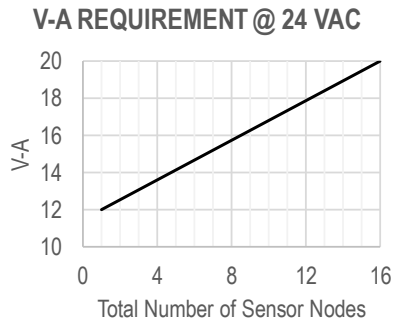
Advantage IV (A4) GTS116e-P WIRING GUIDE



TRANSMITTER CONNECTIONS

Power		Analog Out (isolated)				Ethernet		Type	
L1	L2	A1	A2	A3	C	E1	E2	A	B
24 VAC (hot)	24 VAC (neutral)	Airflow +	Temperature or Alarm +	Psychrometric Property+	Signal Common	RJ-45 CAT5 or greater	RJ-45 CAT5 or greater	2 probes x 8 sensors/probe	4 probes x 4 sensors/probe



INSTRUCTIONS TO INSTALLER:

1. Mount the transmitter in a location where all probe cables can reach the receptacles of the transmitter. Provide a weatherproof enclosure (by others) and mount away from direct sunlight when outdoor mounting is required.
2. Connect the sensor probes to the transmitter. Although probes are "plug and play" and connections to specific receptacles are not required, it is recommended that probes are connected Probe 1 to receptacle C1, Probe 2 to receptacle C2, etc. Probe numbers are indicated on each cable hang tag.

ⓘ *Cables have an FEP plenum rated jacket that are UV tolerant and suitable for operation over the entire operating temperature range of the device.*

⚠ *Sensor probe plugs are keyed and NOT twist-lock. Align the key and push the plug onto the transmitter receptacle. Twisting may damage the connector pins.*

3. Select a 24 VAC transformer that provides 22.8 to 26.4 VAC during operation. Refer to the chart above to optimize the transformer size or size the transformer for 20 V-A for each measurement location.

⚠ *Multiple transmitters wired to a single transformer must be wired "in-phase" (L1 to L1 and L2 to L2).*

4. If analog output signals are used, continue to step 5, otherwise skip to step 6.
5. Connect each analog output signal required to the host B.A.S. using shielded twisted-pair wire. Properly terminate the shield (typically at the B.A.S.).

ⓘ *AO3 (relative humidity, enthalpy, or dew point) is only available if the /H humidify sensor option is provided.*

⚠ *If twisted pair wire and/or shielded cable is not used, extraneous electrical noise can be picked up between the transmitter and host control panel.*

6. If Ethernet connection and DUAL mode is required continue to step 7, otherwise skip to step 9.
7. Connect to *EB-Bus* Ethernet network in E1 port, if required, using a standard RJ-45 terminated Ethernet cable, CAT5 or greater.

ⓘ *In DUAL mode E1 port is only for EB-Bus network connection.*

8. Connect to an Ethernet network (BACnet Ethernet, BACnet IP, Modbus TCP, TCP/IP) in E2 port, if required, using a standard RJ-45 terminated Ethernet cable, CAT5 or greater.
9. If Ethernet connection and DAISY CHAIN mode is required continue to step 10, otherwise skip to step 11.

10. Connect to an Ethernet network (BACnet Ethernet, BACnet IP, Modbus TCP, TCP/IP or *EB-Bus*) in E1 and/or E2 ports, if required, using a standard RJ-45 terminated Ethernet cable, CAT5 or greater.

ⓘ *If only one connection required, either E1 or E2 can be used.*

⚠ *Use of improperly wired RJ-45 connectors may damage the Ethernet output circuit of the transmitter.*

11. Refer to the *GTS116e-P Startup Guide* prior to moving the power switch to the “ON” position.