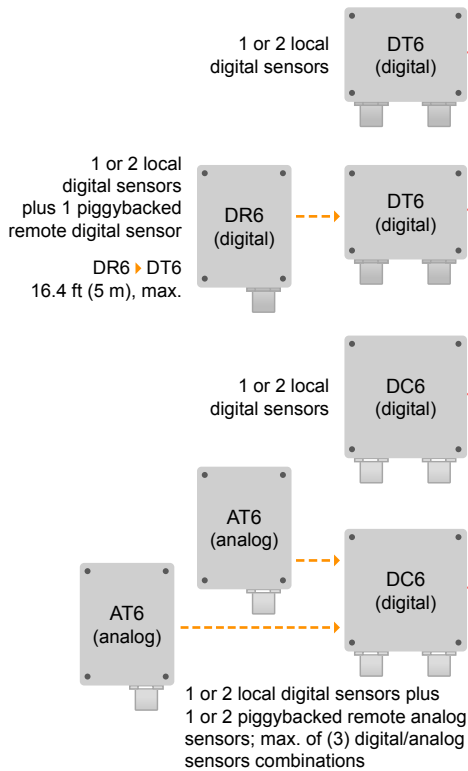


PolyGuard®2 DGC6 Multi-Point RS-485 Digital Gas Detection and Control System Network Overview

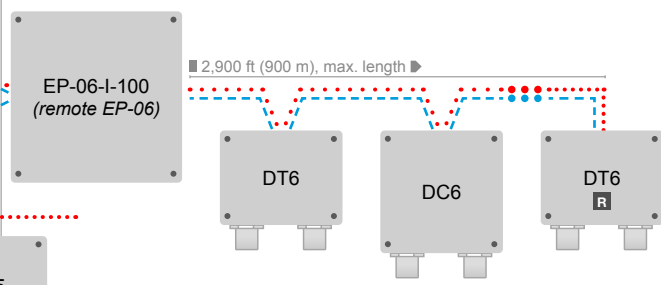
Up to 96 PolyGuard®2 daisy-chained digital sensors (DT6-/DR6-/DC6-Series), or combination of DC6 digital sensors with piggybacked AT6 analog sensors
 1 or 2 digital sensors for DT6- or DC6-Series;
 1 digital sensor for DR6-Series;
 1 analog sensor for AT6-Series



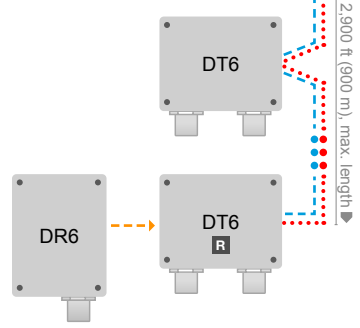
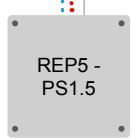
- DGC6 Central Control Unit**
- GC-06 Built-in Controller Programming Module
 - User Interface: LCD, LED, Touch Buttons
 - (4) Digital Inputs
 - (4) Digital Alarm Relay Outputs
 - (2) Analog (4-20 mA) Outputs
 - CON5-A RS-485 Trunk Module, *optional*
 - Trunk/Bus Protector
 - 24 VDC Power Supply
 - EP-06 Relay/AI/AO Expansion Module, *optional*; (5) additional internal modules max., assigned to system as EP-06-01, EP-06-02, EP-06-03, etc.
 - (4) Digital Alarm Relay Outputs
 - (2) Analog (4-20 mA) Outputs
 - BACnet-IP Gateway Coupler, *optional*
 - Modbus RTU Interface, *optional*



- EP-06-I-100 Remote Relay/AI/AO Expansion Module**
 Repeater & power booster, trunk splitter, AR & AO outputs
 Simulates "t-drop" and "star" wiring configurations
 Max. total of (7) EP-06 modules on network, located within the DGC6 and/or remotely installed on the trunk/bus
 Required for:
 - Trunk length over 2,900 ft (900 m)
 - 24 VDC power boosting
 Each module also provides:
 - (4) Digital Alarm Relay Outputs
 - (2) Analog (4-20 mA) Outputs
 "Requires an external 24 VDC power supply"



- REP5 - PS1.5 (Repeater & Power Booster) or PB5 - PS1.5 (Power Booster only)**
 Required for:
 - Trunk length over 2,900 ft (900 m)
 - 24 VDC power boosting
 "Requires an external 24 VAC power supply"



Cabling & Wiring Guidelines

- **RS-485 Com Link & 24 VDC Power Trunk/Bus:** Connect Air #W184C-2059B cable or equivalent recommended; 18 AWG, 4-conductor, two individually shielded twisted pair (STP), all wires different colors
- **Daisy-Chained Wiring Configuration,** wire-splitting of the communication lines possible only with *optional* remote EP-06-I-10 modules; see specific datasheets for detailed wiring diagrams
- Max. total (7) repeaters (CON5-A RS-485, REP5 - PS1.5 or EP-06-I-100) allowed on the network

R = 560 Ω end-of-line terminating resistor