

Q-STAT™

CO₂ and Temperature Monitors

Model 8700 Series LONMARK® Option

The Model 8700 Q-STAT™ products with LONMARK® communications protocol contain the Neuron chip with the LonTalk® protocol, forming a node on the network. As a LONMARK® object, the Q-STAT uses predefined Standard Network Variable Types to exchange information with other nodes. The Q-STAT also employs configuration network variables, allowing the user to determine how often the Q-STAT will update its variables.

Q-STAT LONMARK® Communications

- Sends CO₂ and temperature data
- Digital communications save on wiring costs
- Interoperates with other LONMARK® compliant products
- Eliminates need for gateways and protocol converters

Technical Data

- LONMARK® compliant
- Twisted pair free topology, network type TP/FT-10 at 78 kbps
- Can be connected to both powered and non-powered network



Sensor Data

CO₂

- **Range** 0-2,000 ppm
(Optional) 0-5,000 ppm
0-10,000 ppm
- **Accuracy** ±25 ppm or 2.5% of reading,
whichever is greater
- **Resolution** 10 ppm

Temperature

- **Range** 10-29°C
- **Accuracy** ±0.5°C

Model 8700 CO₂ and Temperature Monitor—LONMARK® Option

Network Variables

nvi00Request: Input variable requests the status of an object within this node.

nvo00Status: Output variable reports the status of any object on the node.

nvo01ppm: Output variable reports the CO₂ level detected by the sensor.

nvo02temp: Output variable reports the temperature detected by the sensor.

nciCO2MaxSend: Condition indicates the maximum period of time that expires before the CO₂ sensor object automatically updates all its output variables. The default value is 300 seconds.

ncitempMaxSend: Condition indicates the maximum period of time that expires before the temperature sensor object automatically updates all of its output variables. The default value is 300 seconds.

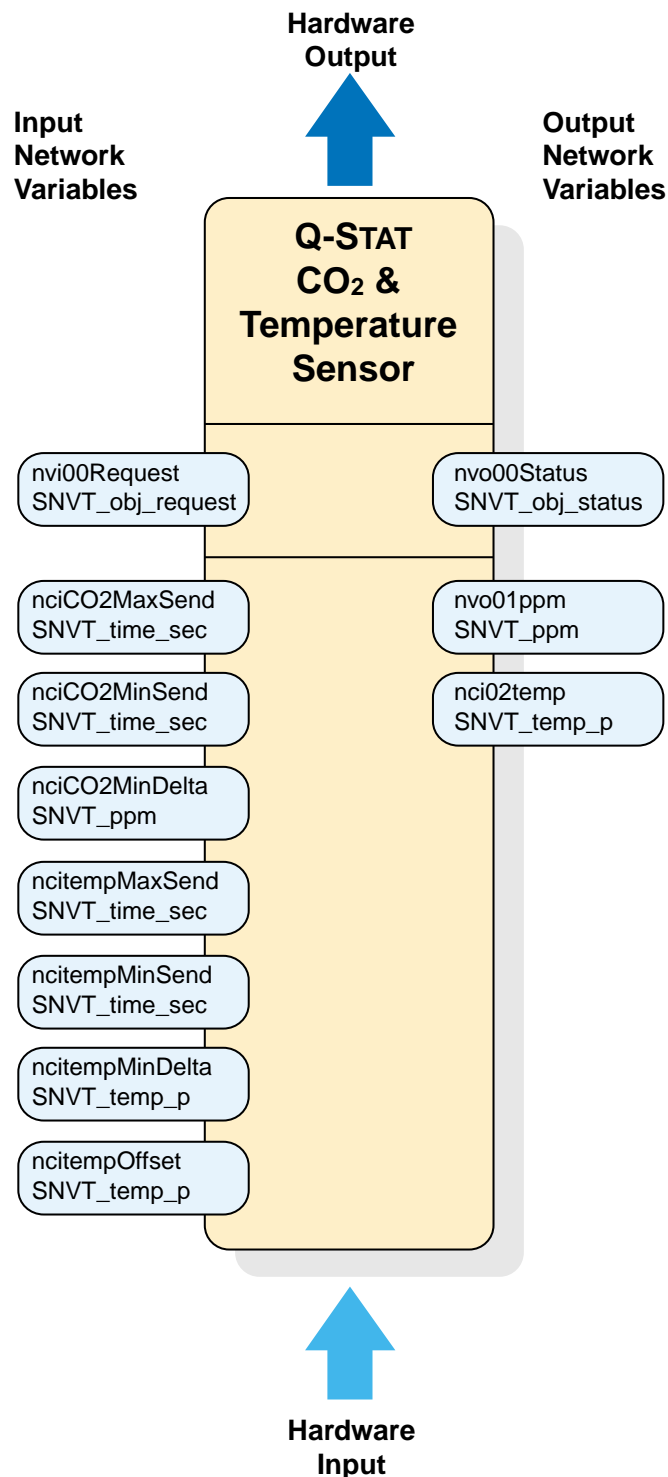
nciCO2MinSend: Condition indicates the minimum period between CO₂ sensor object output network variable transmissions. The default value is 5 seconds.

ncitempMinSend: Condition indicates the minimum period between temperature sensor object output network variable transmissions. The default value is 5 seconds.

nciCO2MinDelta: Condition indicates the minimum CO₂ level change needed to update the CO₂ sensor object output network variables. The default value is 10 ppm.

ncitempMinDelta: Condition indicates the minimum temperature change needed to update the temperature sensor object output network variables. The default value is 0.3°C.

ncitempOffset: Condition specifies the offset for the temperature object. The default value is 0°C.



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