

Reflective Heat Technologies

S-820 Environmental Sensor System

Overview:

RHT's S-820 is an environmental monitoring system, capable of measuring and reporting:

- temperatures in the range of (-40°C to +125°C with 0.125°C accuracy),
- contact closures, and
- analog voltages in the range of 0 to 5 VDC.

A web interface permits local access for configuration and monitoring of the sensor system's function.

Data is transmitted to one or two web database servers, which can be located on, or off-site (via internet). In the event of the failure of the data link between the S-820 and the database server, the S-820 will time-stamp and store data for up to one day.

The Base Module provides an RJ-45 ethernet interface and 8 sensor inputs. 4 of the sensor inputs can be used for either temperature sensors or contact closures, and the remaining 4 sensor inputs can be used for the measurement of analog voltages. All the monitoring system parameters can be configured via web interface using an internal on-board web-server.

The sensor capacity of the S-820 can be extended by adding a remote sensor module which is connected to the S-820 via wired or wireless (100m range) serial interface. The remote sensor module provides an additional 4 temperature/contact closures, and an additional 4 analog inputs.

Applications:

- Local and remote HVAC system monitoring.
- Data center temperature and access control monitoring.
- Solar thermal and photo-voltaic system monitoring.

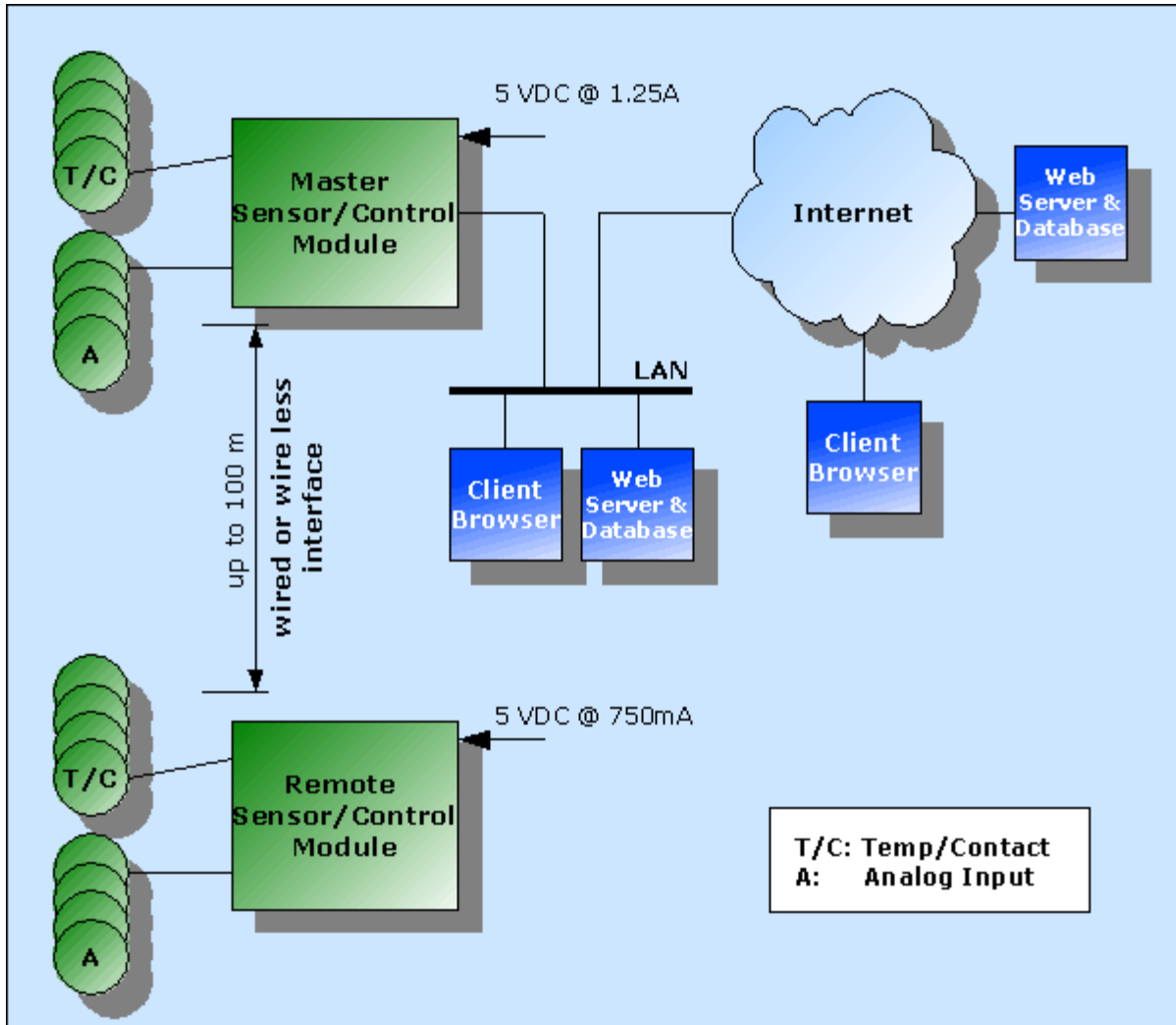
Product Series and Component Combinations:

Functionality	Components Required
4 temp/contact + 4 analog sensors	S-820 Master Module
4 temp/contact + 4 analog sensors + wired remote with 4 temp/contact + 4 analog sensors	S-820 Master Module + S-800 Wired Remote Module
4 temp/contact + 4 analog sensors + wireless remote with 4 temp/contact + 4 analog sensors	S-820 Master Module + S-821 Wireless Interface for Base Module + S-810 Wireless Remote Module

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System Block Diagram:



Master Module with Wired or Wireless Remote Sensor Module