



OptiNet®
Optimizing Ventilation Performance



FEATURES

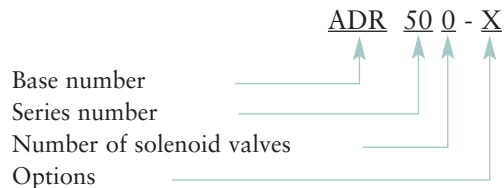
- Up to 4 individual test areas can be monitored from each Air Data Router
- Interfaces to a combination of discrete physical sensors, and remote virtual sensors
- Flexible input/output expansion capability for additional monitoring and interfacing to a Building Management System
- Communicates via the OptiNet® network connection to the SST700 Sensor Suite

ADR500 Air Data Router

The ADR500 Air Data Router provides distributed air and data packet routing of a host of environmental conditions throughout a facility. The Air Data Routers receive commands from the SST700 Sensor Suite to open the router's on-board solenoid valve for the test area to be monitored while simultaneously closing all the other solenoid valves in the system. Air "packets" are then drawn from the test area through the OptiNet structured cable back to the sensors within the Sensor Suite.

Multiple areas can be monitored from one Air Data Router, while routers can be networked as part of a larger distributed system. Point expansion capabilities at the Air Data Router are also available for interfacing with a Building Management System and other HVAC equipment.

Ordering guide



Blank = no options

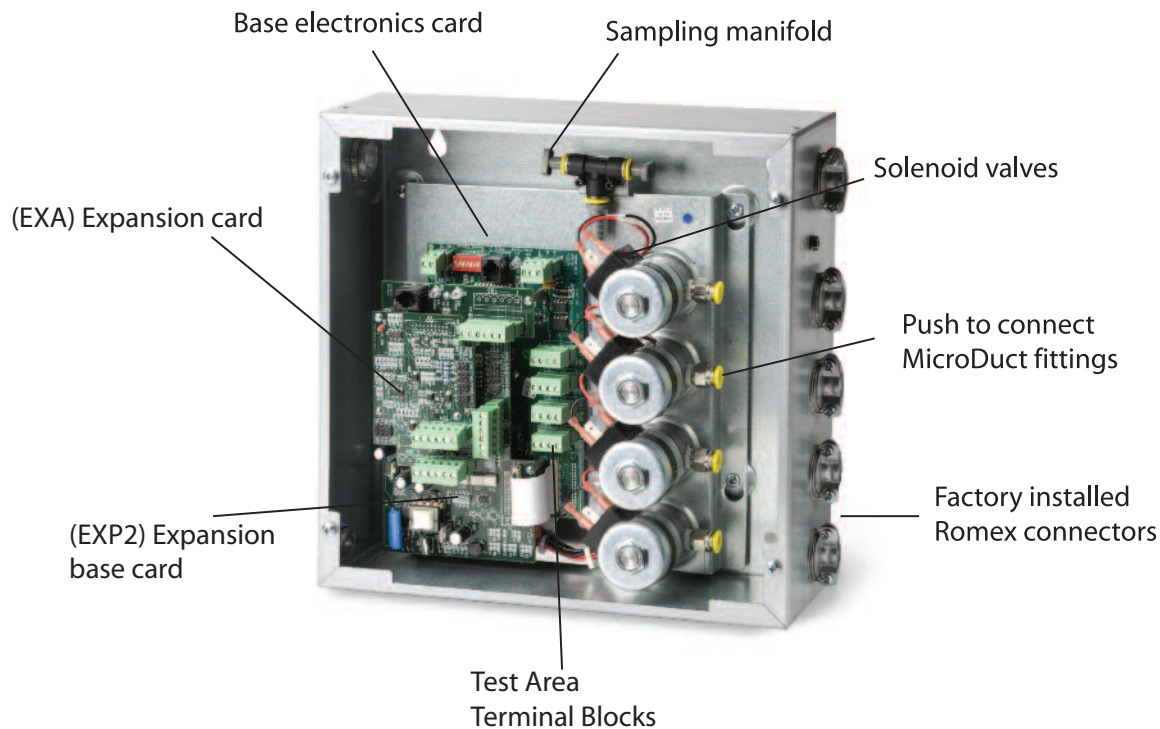
Expansion Point Module

EXP2 = Base card - 4 network writable analog outputs (0-5Vdc), and 4 universal inputs (configuration options for 0-10Vdc, 4-20mA). The add-on EXA expansion card provides additional network writeable universal inputs and outputs.

EXA = Expansion card (requires base card) - 4 universal inputs (configuration options for 0-10Vdc, 4-20mA) and 4 network writable universal outputs (configuration options for 0-10Vdc, 4-20mA).

Other

ZVL = Zone valve kit includes solenoid valve, mounting hardware, wiring harness, and push to connect fittings to add one additional zone to an existing ADR500.



SPECIFICATIONS

Mechanical

Operating environment: 40° - 120°F (4.4° - 49°C), 0-90% RH (non-condensing)

Size: 12"H x 12"W x 4.5"D

Weight: 15 lbs.

Enclosure type: NEMA 1

Mounting: Wall mount

Solenoids: Each router supports up to 4 solenoids – 1 per test area, latching style

Electrical

Power: 24Vac, ±15% 60 Hz

Power consumption:

ADR: 4VA

EXP2 Base Card: 4 VA

EXA Card: 2 VA

Communications

Network interface: OptiNet RS-485

Network speed: 19.2K baud

Network length: 500 ft. standard

Network media: OptiNet structured cable with composite 22ga twisted shielded pair and internal MicroDuct®.

Connections

Power: 2-position, pluggable screw terminal

Inputs/Outputs:

ADR: 4-position, pluggable screw terminal

EXP2: 6-position, pluggable screw terminals

EXA: 6-position, pluggable screw terminals

Communications

OptiNet: 3-position, pluggable screw terminal connector

MicroDuct: Push-to-connect

Service port: Female RJ11 jack, RS-232

Optional Expansion Point Module (EXP2):

- **Base card:** Provides galvanic isolation, power, and signal processing for I/O expansion. The Base Card includes four (4) network writeable analog outputs (0-5Vdc), and four (4) network readable universal inputs (UI configuration options 0-10Vdc/4-20mA).
- **EXA daughter card:** Designed to plug into the EXP2 base card to provide four (4) additional network readable universal inputs (0-10Vdc/4-20mA) and four (4) network writeable universal outputs (0-10Vdc/4-20mA).

U.S. Patents

7,415,901; 7,389,704; 7,389,158;
7,360,461; 7,302,313; 7,216,556;
6,425,297; 6,252,689; 6,125,710

UL Listed

UL916 Energy Management Equipment