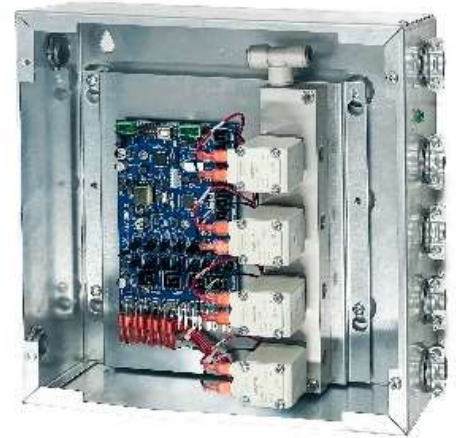


# ADR604

Air Data Router



## ADR604 Air Data Router

The Air Data Router (ADR) provides the means of routing air sample packets and temperature data from the desired test location back to the Sensor Suite (SST) for measurement. The SST and associated ADRs are connected via a backbone consisting of OSC Structured Cable (OSC). The ADR and its four individual test area locations can be connected via OSC, OT Tubing, or MicroDuct<sup>®</sup> depending on the application. Refer to the individual product data sheets OSC100, OT100, & MD100 for more information. Optional hardwired IO feature allows for monitoring, signaling, and data collection of located HVAC equipment.

### Features



Up to 4 individual test areas can be monitored from each Air Data Router



Interfaces to a combination of discrete physical sensors & remote virtual sensors

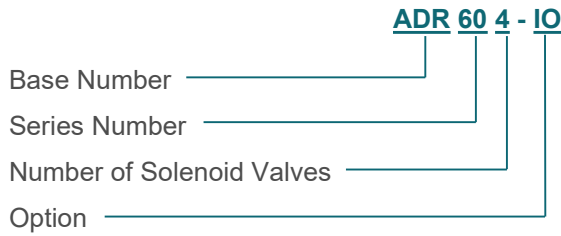


Optional -IO version provides hardwired input and output capabilities for additional monitoring and interfacing with local controllers or the BMS



Communicates via the Aircuity network connection to the SST

## Ordering Guide

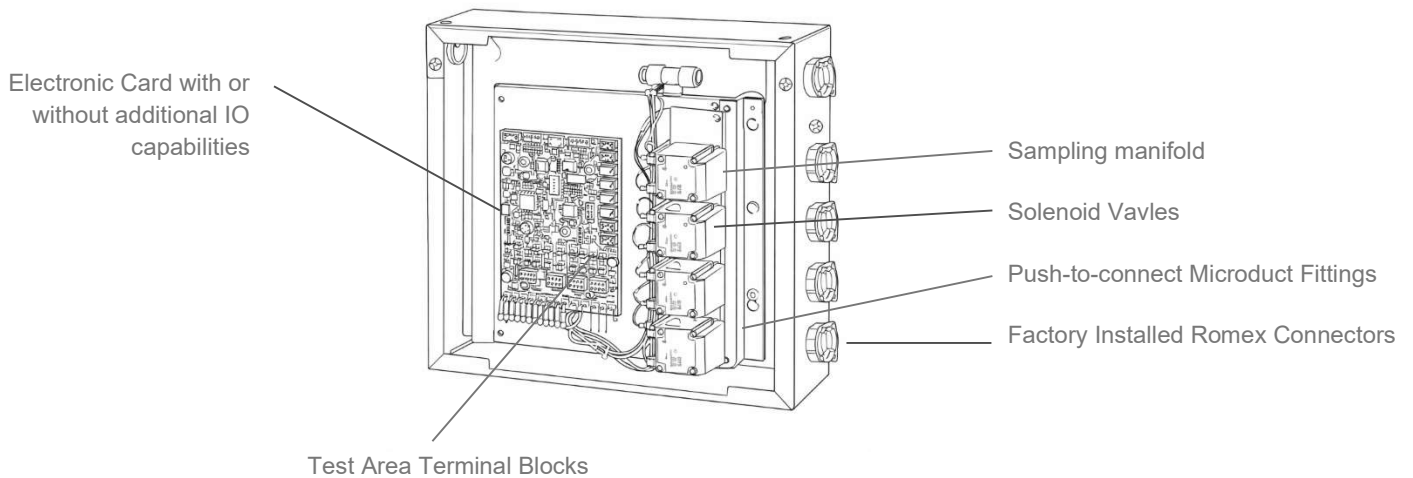


**IO** Incorporates 8 Universal Outputs and 8 Universal Inputs (0-10 VDC or 4-20 mA) for hardwire integration applications

**Blank** No Options

### ADR604

- Compatible with OSC100, MD100, OT100 tubing (with OT-E11 adapter)
- Designed for all applications



## Specification

### Mechanical

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

### Enclosure Size:

**ADR604:** 12.125"H x 12.125"W x 4.375"D  
(30.80 H x 30.80 W x 11.11 D cm)

### Weight:

**ADR604:** 15 lbs (6.80 kg)

### Enclosure Type: NEMA-1

**Mounting:** Surface mount  
**Solenoids:** ADR supports 4 solenoids:  
1 per test area, latching style

### Electrical

**Power:** 24 Vac, ±15% 60 Hz

### Power Consumption:

ADR604: 4.5 VA  
ADR604-IO: 6VA

### Communications (subnet)

**Interface:** RS-485, non-isolated  
**Speed:** 19.2K baud  
**Maximum Length:** 500' per limb  
**Electrical:** 22 AWG, twisted-shielded pair, with drain wire (included within OSC100)

### Connections

**Power:** 2-position, pluggable screw terminal block

### Input/Outputs:

**ADR:** 4-position, screwless terminal block plug  
**IO Option:** 8-position, screwless terminal block plug

### Vacuum:

**SST to ADR Backbone:** OSC100, push-to-connect fitting

**ADR604 to Area Being Sampled:** Tubing: Compatible with all Aircuity Structured Cable/Tubing (OSC100 MD100/OT100\*) excluding vacuum pump system tubing.

\*OT100 requires OT-E11, must be purchased separately

### Communications:

**Aircuity Network:** 3-position, pluggable screw terminal block  
**Service Port:** USB Type-B

### IO Option

Provides galvanic isolation, power, and signal processing for I/O expansion.

The additional circuit board components allow for (8) universal outputs (0–10 Vdc or 4–20 mA) and (8) universal inputs (0–10 Vdc or 4–20 mA)

### 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 8,147,302 B2 and others pending

### Regulatory Compliance

UL916 Energy Management  
Equipment  
Part 15



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