

# OSC100 Structured Cable

Last Modified on 11/12/2021 8:07 am EST

The OSC Structured Cable (OSC) is composed of a hollow inner tube used to transport air sample packets, interlaced low voltage power and data communications conductors, and a protective outer sheath. It is primarily used between the Sensor Suite (SST) and its associated Air Data Routers (ADR) as the backbone for the Aircuity System and can also be used between the ADR and any test area location. The inner tube, known as MicroDuct®, is a technology breakthrough composed of a fluoropolymer resin and carbon nanotube blend. The patented design ensures the air sample packets remain uncontaminated and unrestricted as they travel throughout the Aircuity System. The MicroDuct is used for environments where carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), total volatile organic compounds (TVOCs), particle counts, and dewpoint may be monitored. The low voltage conductors allow discrete dry bulb temperature readings to be taken at the test area location in conjunction with an Aircuity probe having a resistance temperature detector (RTD). Without an RTD, calculated points including relative humidity, humidity ratio, and enthalpy are not available.

[Download the Data Sheet](https://dyzz9obi78pm5.cloudfront.net/app/image/id/59e62db8ec161c7e60250f08/n/oscstructuredcable-osc.pdf)  (<https://dyzz9obi78pm5.cloudfront.net/app/image/id/59e62db8ec161c7e60250f08/n/oscstructuredcable-osc.pdf>)

