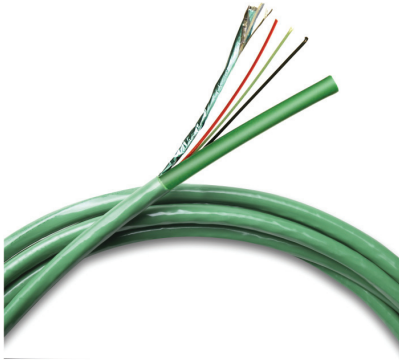


# OSC100

OptiNet® Structured Cable



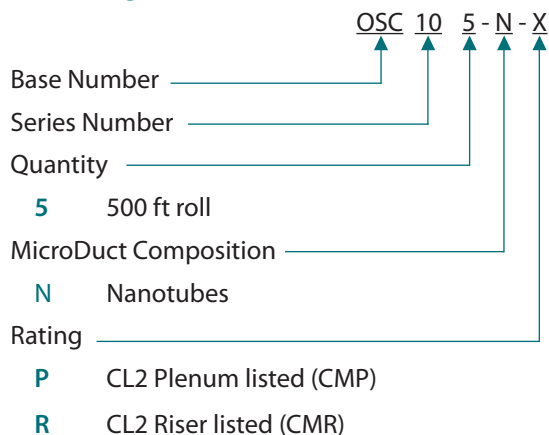
## OSC100 OptiNet Structured Cable

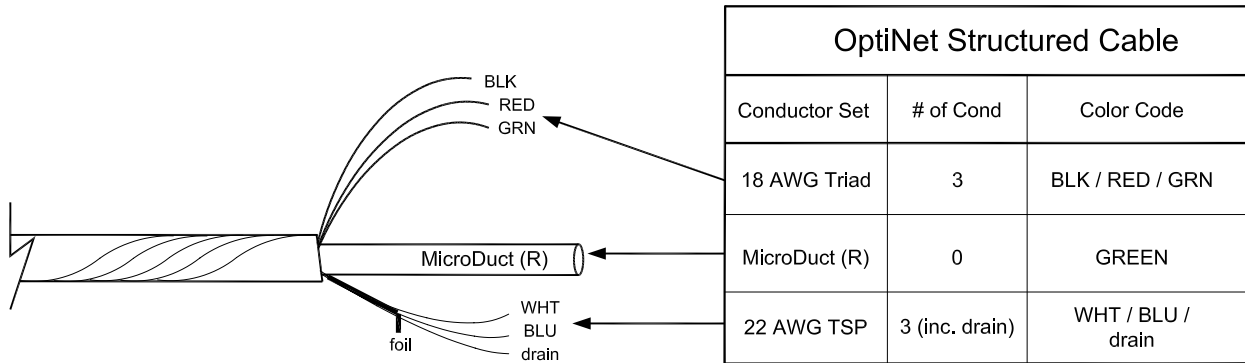
The OptiNet Structured Cable (OSC) is the communications backbone for Aircuity's OptiNet system. The cable is a composite of both traditional LAN based technologies, and a cutting edge air sampling medium called MicroDuct®. This state-of-the-art structured cable provides low voltage power throughout the system, is a pathway for network data communications and transports air sample packets through its hollow inner core. This inner core, known as MicroDuct, is a technology breakthrough, a fluoropolymer resin and carbon nanotube blend. This patented design ensures that particle transport is unrestricted and air samples remain pure and uncorrupted.

### FEATURES

- Carbon nanotube and fluoropolymer blend provides superior particle transport and chemical purity of the air sample.
- A single OptiNet cable houses network communications, low voltage power and area-level discrete and virtual sensing.
- No special tools or installation techniques are required. Similar to typical voice, data, and telecommunications network cables.
- Two versions are available, Plenum and Riser rated for new and existing construction.

### Ordering Guide





## Specifications

## Plenum Rated Cable (CMP)

## Riser Rated Cable (CMR)

<b>Outer jacket nominal thickness</b>	0.020"	0.020"
<b>Maximum pull tension</b>	100 lbs. (444 Newtons)	100 lbs. (444 Newtons)
<b>Minimum bend radius</b>	3.5"	2"
<b>Cross sectional area</b>	0.237 sq. in	0.237 sq. in
<b>Printed running footage marking</b>	2 feet	2 feet
<b>Weight (approximate)</b>	500' reel: 50 lbs. (22.5 kg)	500' reel: 50 lbs. (22.5 kg)
<b>Dimensions</b>	18" Diameter, 10" Width	18" Diameter, 10" Width
<b>Conductors</b> Communications Low voltage power MicroDuct	22ga twisted shield pair with drain wire 18ga, 3 wire Fluoropolymer/carbon nanotubes	22ga twisted shield pair with drain wire 18ga, 3 wire Fluoropolymer/carbon nanotubes
<b>Mechanical Characteristics</b> Operating temperature range Overall nominal diameter	-20°C to +125°C .500"	-20°C to +75°C .500"
<b>Applicable Standards/ Regulatory Compliance</b>	CMP, NEC 800.51 (A) NFPA 262, UL-910 <b>FC</b> Part 15 Class A <b>CE</b>	CMR, NEC 800.51 (B) ANSI 1666, UL-1666 <b>FC</b> Part 15 Class A <b>CE</b>
<b>U.S. Patents</b> 6,125,710; 7,216,556; 7,360,461; 7,389,704		