

nu-TRAC[®] TRC-1250

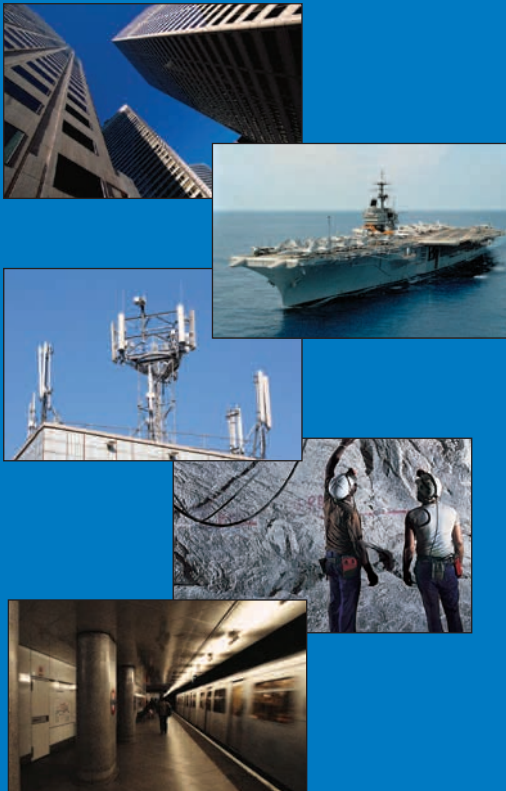
ISO 9001 Certified

Provides Interior RF Communications

- *Tunnels*
- *Subways*
- *Ships*
- *Metal Framed Buildings*

Advantages

- *Stable Electrical Performance*
- *More flexible than corrugated designs*
- *No need for cable standoffs*



nu-TRAC TRC-1250 triaxial antenna cable is designed to provide controlled coverage in areas where RF propagation from a point source antenna is ineffective. Examples of common installations are subways, tunnels, ships, and metal framed buildings. The cable can function both as a transmit and receive antenna over a broad range of frequencies. The unique triaxial design allows for the cable to be mounted directly to a wall, thus eliminating cable standoffs and facilitating easy installation.

The nu-TRAC series cables have been approved and installed in a wide range of tunnel applications including The New York City Transit Authority, London Underground, Beijing Metro, St Petersburg Metro and Moscow Monorail Systems.

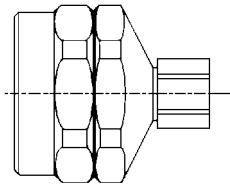
nu-TRAC TRC-1250 Specifications:

System Design:

The probability graphs below are intended as a guide to system design using nu-TRAC cable. By determining all passive system losses including radiating cable attenuation, splitters, etc., and subtracting this number in dB from the difference between the transmitter power and the receiver sensitivity, a number called Systems Available Power (SAP) is found. This can be looked up in the appropriate graph and the probability of communication can be read.

Connectors:

The TRB-1250 is an N-type connector designed for TRC-1250 cable. It features easy installation with no special tools required. Connection is made to the inner conductor using a standard self taping center contact. The outer conductor is connected by clamping the drain wires, which make continuous contact with the outer shield along the length of the cable.



Part Description	
Type No.	
Cables	
TRC 1250-PE	Polyethylene - outdoor version
TRC 1250-VW1	Non-halogen, fire retardant polyolefin
TRC 1250-FR	Highly fire retardant non-halogen polyolefin
Connectors	
TRB 1250-NF	"N" female connector
TRB 1250-NM	"N" male connector

Mechanical Specifications		
Performance Property	Units	US/Metric
Diameter	in.(mm)	1.67 / (42.4)
Weight	lb/ft(kg/m)	0.742/ (1.10)
Crush Strength	lb/in.(kg/mm)	300 / (5.3)
	Max.2 Ohm imp. change	
Tensile Strength	lb (kg)	1500 / (680)
Minimum bend radius	lb/in.(kg/mm)	13.5 / (342)

Electrical Specifications			
Performance Property	Units	US	Metric
Velocity of Propagation	%		86
Impedance	Ohms		50
VSWR, typical 150-900 MHz			1.2
Coupling Loss	dB	@ 20 ft	
150 MHz			74
450 MHz			79
900 MHz			80
1900 MHz			78
2400MHz			79
Attenuation	dB	/ 100 ft	/ 100 meters
150MHz		0.39	1.3
450MHz		0.79	2.6
900MHz		1.23	4.0
1900 MHz		1.95	6.40
2400MHz		2.40	7.90

% Probability of Communication

