RAYCHEM
INSTALITE LIGHTWEIGHT BRAID

UP TO 50% LIGHTER THAN TRADITIONAL COPPER BRAID—WITH EXCELLENT EMI PERFORMANCE AND LIGHTNING PROTECTION

WEIGHT SAVINGS

- Up to 50% lighter than traditional braid

COST EFFECTIVE

- Easy transition from traditional braids

EXCELLENT SHIELDING

- Covers wide frequency range
- Better low-frequency performance than plated fibers or microfilaments
- Lightning protection

EASY TO USE

- Uses existing termination tooling and processes

Less Weight in Familiar Braid Technology

Offering up to 50% weight savings over traditional copper braids, INSTALITE lightweight braid has excellent electrical shielding performance over a wide frequency range. Made from a high-performance nickel-plated copper alloy, the RoHS-compliant pull-on braid is supplied on a former for easy installation onto various substrates.

Available in diameters from 3 to 20 mm, INSTALITE braid is more flexible than traditional metal braids, making it very user friendly to work with.

Low Risk Alternative for Lightweight Shielding

Since INSTALITE braid uses well-established metal braiding, the transition from traditional braids to INSTALITE braid is easy. The product can be terminated by standard tooling and installation procedures for existing backshells and band straps, making it easy to introduce it into current applications.

RAYCHEM INSTALITE LIGHTWEIGHT BRAID

EMI and Lightning Protection That Is Up to 50% Lighter

APPLICATIONS

- Military Harnesses
- Commercial Aerospace
- Unmanned Vehicles
- Space

MATERIALS

- **Braid**: Copper alloy, tin or nickel plated
- **Former**: Plastic

ELECTRICAL

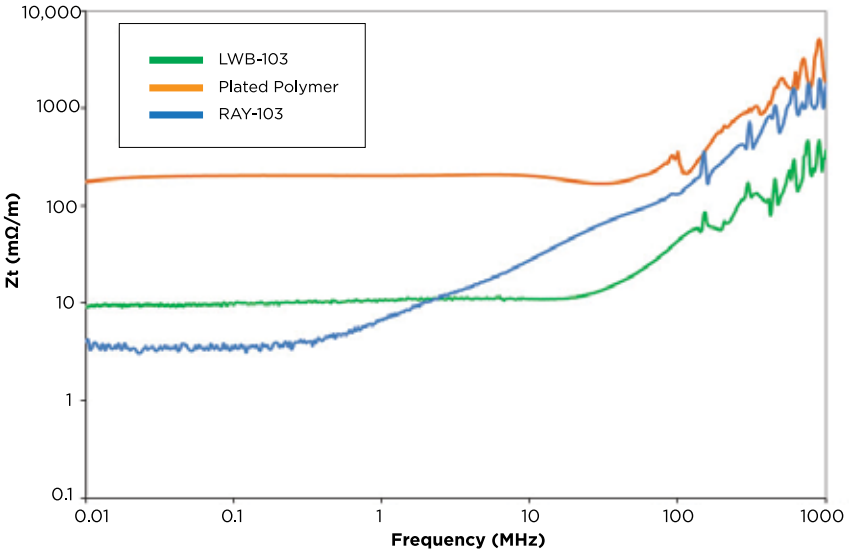
- **Lightning Test**: Waveform 5B, 21 kA

ENVIRONMENTAL

- **Temperature Range**:
  Tin Plated (LWB-101-xx): -65°C to +150°C
  Nickel Plated: (LWB-103-xx): -65°C to +200°C
- **Salt Spray**: ASTM B117
- **Flex Endurance**: 1000 cycles min., SAE AS4373 method 704 (180-degree bend)
- **RoHS Compliant**
- **Product Specification**: WSD2516
- **Packaging**: 50 and 100-meter spools

Diameter, mm (Inch)	Part Number	
	Tin Plated	Nickel Plated
3 (0.12)	LWB-101-3.0	LWB-103-3.0
6 (0.24)	LWB-101-6.0	LWB-103-6.0
10 (0.40)	LWB-101-10.0	LWB-103-10.0
20 (0.79)	LWB-101-20.0	LWB-103-20.0

INSTALITE Lightweight Braid versus Standard Braid (10 mm Braid)		
(Nominal Values)	**INSTALITE LWB**	**Standard Braid**
DC Resistance (mΩ/m)	9	3.5
Strand Tensile Strength (N/mm^2)	758	220
Strand Break Strength (N)	15.2	11.14
Weight (kg/km)	28	60



Braids are 10-mm OD
RAY-103 = Traditional braid (control)
LWB-103 lightweight braid = 50% weight savings
Plated fibers = 80% weight savings; 100x worse surface transfer impedance up to 10 MHz

TE Components . . . TE Technology . . . TE Know-how . . .
AMP | Agastat | CII | Hartman | Kilovac | Microdot | Nanonics | Polamco | Raychem | Rochester | DEUTSCH
SEACON Phoenix | L.L. Rowe | Phoenix Optix | SEACON

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