**CELLFLEX Lite**

**RADIO FREQUENCY SYSTEMS**

The Clear Choice®

**Innovation and engineering experience**

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**RFS world**

Represented on six continents, with 10 manufacturing centers of excellence and 36 technical support and sales offices in 21 countries.

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**CELLFLEX Lite**

1/2 up to 1-5/8-inch cables

A complete range of the most commonly used sizes

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**CELLFLEX Lite**

<table>
<thead>
<tr>
<th>Type</th>
<th>Low-Loss Lite</th>
<th>Low-Loss Lite</th>
<th>Ultraflexible Lite</th>
<th>Low-Loss Lite</th>
<th>Ultraflexible Lite</th>
</tr>
</thead>
<tbody>
<tr>
<td>INNER CONDUCTOR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>AlCu-Wire</td>
<td>Copper Tube</td>
<td>Corrugated Copper Tube</td>
<td>Corrugated Copper Tube</td>
<td></td>
</tr>
<tr>
<td>Dimension (mm)</td>
<td>4.8 (0.19)</td>
<td>9.3 (0.37)</td>
<td>13.1 (0.52)</td>
<td>9.5 (0.37)</td>
<td>13.8 (0.55)</td>
</tr>
<tr>
<td>OUTER CONDUCTOR</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>Corrugated Aluminium</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimension (mm)</td>
<td>13.8 (0.54)</td>
<td>25.2 (0.99)</td>
<td>36.0 (1.42)</td>
<td>25.2 (0.99)</td>
<td>36.0 (1.42)</td>
</tr>
<tr>
<td>JACKET</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>Polyethylene, PE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dimension (mm)</td>
<td>15.8 (0.62)</td>
<td>27.6 (1.08)</td>
<td>39.0 (1.54)</td>
<td>27.6 (1.08)</td>
<td>39.0 (1.54)</td>
</tr>
</tbody>
</table>

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**Type**

- Low-Loss Lite
- Ultraflexible Lite

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**Material**

- AlCu-Wire
- Copper Tube
- Corrugated Copper Tube
- Corrugated Aluminium
- Polyethylene, PE

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**Dimension [mm (in)]**

- Inner conductor: 4.8 (0.19), 9.3 (0.37), 13.1 (0.52), 9.5 (0.37), 13.8 (0.55)
- Outer conductor: 13.8 (0.54), 25.2 (0.99), 36.0 (1.42), 25.2 (0.99), 36.0 (1.42)
- Jacket: 15.8 (0.62), 27.6 (1.08), 39.0 (1.54), 27.6 (1.08), 39.0 (1.54)

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**Frequency [GHz]**

- 900 MHz: 7.39 (2.25), 3.96 (1.21), 2.84 (0.867), 4.30 (1.31), 3.31 (1.01), 2.32 (0.707)
- 1800 MHz: 10.7 (3.26), 5.76 (1.76), 4.18 (1.27), 6.30 (1.92), 4.84 (1.47), 3.45 (1.05)
- 2200 MHz: 11.9 (3.63), 6.43 (1.96), 4.69 (1.43), 7.06 (2.15), 5.41 (1.65), 3.88 (1.18)
- 2600 MHz: 13.1 (3.98), 7.05 (2.15), 5.16 (1.57), 7.76 (2.37), 5.95 (1.81), 4.28 (1.31)
- 3500 MHz: 15.4 (4.69), 8.33 (2.54), 6.13 (1.87), 9.21 (2.81), 7.05 (2.15)

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**Maximum Operating Frequency [GHz]**

- 8.8
- 5
- 3.6
- 2.6
- 1.3
- 0.9

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**MINIMUM OPERATING FREQUENCY [GHz]**

- 8.9
- 5.4
- 3.6
- 2.6
- 1.3
- 0.9

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**MEAN POWER RATING [kW]**

- **900 MHz:**
  - RFS MUX: 1.20
  - RFS HBA: 0.832
  - RFS HBA: 0.748
  - RFS MUX: 0.679
  - RFS MUX: 0.578

- **1800 MHz:**
  - RFS MUX: 2.68
  - RFS HBA: 1.84
  - RFS HBA: 1.65
  - RFS MUX: 1.50
  - RFS MUX: 1.27

- **2200 MHz:**
  - RFS MUX: 3.98
  - RFS HBA: 2.71
  - RFS HBA: 2.41
  - RFS MUX: 2.19
  - RFS MUX: 1.85

- **2600 MHz:**
  - RFS MUX: 5.04
  - RFS HBA: 3.27
  - RFS HBA: 2.71
  - RFS MUX: 2.72
  - RFS MUX: 2.12

- **3500 MHz:**
  - RFS MUX: 7.35
  - RFS HBA: 4.64
  - RFS HBA: 3.88
  - RFS MUX: 3.72
  - RFS MUX: 2.75

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**RADIO FREQUENCY SYSTEMS**

The Clear Choice®

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Cellular Illinois | Mexico | São Paulo | Taiwan

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Innovation and engineering experience

CELLFLEX®Lite is the product of RFS's engineering team’s innovative design concepts and know-how gained from several decades as a market leader. The result is a transmission line that corresponds to the diverse installation requirements of companies and carriers.

Features

- World-class innovation in transmission lines
- CELLFLEX®Lite is available in 1/2” to 1-5/8” diameter size types.
- Its lightweight design, coupled with its single and multiple bending-radius capabilities allow fast installation and make it ideal for congested tower-top applications.
- CELLFLEX®Lite offers an alternative price point and performance combination for establishing the base station to antenna RF link. Its robust construction and advanced electrical performance confirm CELLFLEX®Lite as the next generation in RF transmission development.

Benefits

- Simulation of Accelerated Lifetime: Qualification tests have been performed on CELLFLEX®Lite cable according to international standards to confirm that the outstanding product performance is maintained after severe mechanical stresses and environmental influences. The conditions applied during the tests are more severe compared to those to be expected in real applications after many years of lifetime use. In that respect the tests are accelerated lifetime tests to guarantee a reliable and trouble-free product performance of more than for over 15 years.
- Simulation of mechanical and electro-magnetic properties.
- Numerical modeling of mechanical and electro-magnetic properties.
- Qualification tests have been performed on CELLFLEX®Lite cable according to international standards to confirm that the outstanding product performance is maintained after severe mechanical stresses and environmental influences. The conditions applied during the tests are more severe compared to those to be expected in real applications after many years of lifetime use. In that respect the tests are accelerated lifetime tests to guarantee a reliable and trouble-free product performance of more than for over 15 years.
- OMNI FIT™ connectors are fully inter-changeable between copper and Lite cables.
- Radio Frequency Systems - The Clear Choice® - Provides a lightweight transmission line solution
- Reduced CAPEX spending
- Reduced work-force and lifting gear
- Exhibits a cost-efficient alternative to copper transmission line
- Is offered in a 1/2” up to 1-5/8” diameter size
- Covers the majority of applications
- Is easy to transport, handle and install
- Savings in shipping cost
- Makes rapid roll-out of wireless network infrastructure possible
- First to market
- Is available with UV-resistant polyethylene or flame-retardant jackets
- Choice of standard halogen free and flame retardant jacket options
- Has a return loss performance equal to that of CELLFLEX 'A'
- Maintained premium antenna system performance
- Unsacrificed coverage
- Specially developed connectors exhibit low and stable intermodulation performance
- No sensitivity degradation of basestation system
- Boasts an attenuation of less than 6.25dB/100m @ 2 GHz (valid for 1/2”)
- Boasts an attenuation of less than 6.25dB/100m @ 2 GHz (valid for 1/2"

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