# Fiber Optic Test Adapters and Cables

## Key Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>JDSU products with optical interfaces</td>
<td>A complete range of adapters and cables suitable for all JDSU products with optical interfaces.</td>
</tr>
<tr>
<td>PC and APC connectors</td>
<td>Ready for all common 2.5 and 1.25 mm connectors.</td>
</tr>
<tr>
<td>PC and APC</td>
<td>Suitable for both PC and APC.</td>
</tr>
<tr>
<td>High measurement accuracy</td>
<td>Accurate power measurements with built-in reflection trap (2014 series).</td>
</tr>
<tr>
<td>PC and APC adapter series</td>
<td>2150 and 2060 adapters for physical contact ports (PC, APC).</td>
</tr>
</tbody>
</table>

JDSU offers a wide range of adapters and cables for connecting fiber optic test equipment to the various fiber optic connector systems used today. The universal adapters are very easy to use and ready for future standards. It is very easy to adapt existing instrument to new connector systems. The adapters allow simple access for cleaning or inspection. Adapters and cables are available for multimode and singlemode applications.

### 2060 universal test adapters

The 2060 test adapter system is designed for precise fiber to fiber coupling. The port of the instrument has a ferrule with a fiber inside. The test cable is connected to this fiber with physical contact and the 2060 adapter system guarantees a precise alignment of the fiber from the connector of the external test cable with the fiber in the instrument's port. 2060 universal test adapters work with physical contact (PC) and angled physical contact (APC).

### 2150 universal test adapters

Like the 2060 adapters the 2150 universal test adapters are designed for precise fiber to fiber coupling and also the 2150 system guarantees a perfect alignment of the fiber from the instrument's port with the fiber from the external connector. With its quick-lock technology, the 2150 adapter system speeds up the time for changing the adapters.

### 2014 universal test adapters

The 2014 adapters are designed for instruments with direct coupling of the test cable to a photo detector. They are also available for various connector standards. A built-in reflection trap in the adapters prevents multiple reflections between the connector's end face and the detector, which would cause incorrect results. This guarantees constant high measurement accuracy regardless of the reflectivity and quality of the surface of the connector. The 2014 universal push pull adapters (UPP) are available for 2.5 or 1.25 mm connectors.

One 2.5 mm UPP adapter fits to all 2.5 mm fiber optic connectors as well as the 1.25 mm UPP adapter fits to all 1.25 mm connectors. So the UPP adapters reduce the numbers of adapters needed for power meters.

All 2014 adapters are designed to be used with PC and with APC connectors.
Fiber Optic Test Adapters and Cables

Specifications

Fixed attenuators/mating sleeves
The S31XX series of fiber optic mating sleeves complement the test adapters and cables. They are used to connect two fiber optic connectors together, e.g. connect two jumper cables.

K30XX, K31XX test and adapter cables
Fiber optic jumper cables are used to connect the device under test (DUT) with the instrument or for connecting instruments together. The series of K20XX cables are comprised of multimode fiber and the K31XX are comprised of singlemode fiber. The cables are available with various connectors. If equipped with different connectors at both ends they could be used as an adapter from one connector standard to another.

Singlemode fixed attenuators
JDSU offers several optical fixed attenuators with different connectors and different attenuation values.

PC (Physical Contact)
Refers to an optical connector that allows the fiber ends to physically touch. Used to minimize back reflection and insertion loss.

APC (Angled Physical Contact)
A style of fiber optic connector with a 5° to 15° angle on the connector tip for the minimum possible back reflection.

Air gap coupling
Principle of air gap coupling between fiber and photo diode used with 2014 adapters.

Fiber to fiber coupling
Principle of fiber to fiber coupling for laser, LED or photo diodes used with 2060 or 2150 adapters.

Reflection trap
The reflection trap in 2014 adapters avoids multiple reflections to provide highest accuracy.
# Specifications

## Test adapters

<table>
<thead>
<tr>
<th>Connector type</th>
<th>Ferrule diameter</th>
<th>Order number 2014 adapter</th>
<th>Order number 2060 adapter</th>
<th>Order number 2150 adapter</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC-PC, FC-APC</td>
<td>2.5 mm</td>
<td>2014/00.09</td>
<td>2060/00.51</td>
<td>2150/00.51</td>
</tr>
<tr>
<td>SC-PC, SC-APC</td>
<td>2.5 mm</td>
<td>2014/00.24</td>
<td>2060/00.58</td>
<td>2150/00.58</td>
</tr>
<tr>
<td>LC, F-3000</td>
<td>1.25 mm</td>
<td>2014/00.29</td>
<td>2060/00.59</td>
<td>2150/00.59</td>
</tr>
<tr>
<td>ST</td>
<td>2.5 mm</td>
<td>2014/00.21</td>
<td>2060/00.32</td>
<td>2150/00.32</td>
</tr>
<tr>
<td>F-SMA</td>
<td>3.175 mm</td>
<td>2014/00.02</td>
<td>2060/00.36</td>
<td>n.a.</td>
</tr>
<tr>
<td>DIN 47256</td>
<td>2.5 mm</td>
<td>2014/00.17</td>
<td>2060/00.50</td>
<td>2150/00.50</td>
</tr>
<tr>
<td>E-2000</td>
<td>2.5 mm</td>
<td>2014/00.26</td>
<td>2060/00.53</td>
<td>n.a.</td>
</tr>
<tr>
<td>UPP for FC, SC, ST, DIN</td>
<td>2.5 mm</td>
<td>2014/00.27</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>UPP for FC, SC, ST, DIN and Optifit MST</td>
<td>2.5 mm</td>
<td>2014/00.31</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>UPP for LC, MU, F-3000</td>
<td>1.25 mm</td>
<td>2014/00.28</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
</tbody>
</table>

Other connector types and bare fiber adapters are available on request.

## K30xx, K31xx test and adapter cables

### 50/125 µm multimode, 2 m length

<table>
<thead>
<tr>
<th>Type</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST–ST</td>
<td>K3027</td>
</tr>
<tr>
<td>ST–FC-PC</td>
<td>K3023</td>
</tr>
<tr>
<td>ST–SC-PC</td>
<td>K3026</td>
</tr>
<tr>
<td>ST–DIN 47256</td>
<td>K3025</td>
</tr>
<tr>
<td>ST–F-SMA (3.175 mm)</td>
<td>K3029</td>
</tr>
</tbody>
</table>

### 62.5/125 µm multimode, 2 m length

<table>
<thead>
<tr>
<th>Type</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>ST–ST</td>
<td>K3028</td>
</tr>
<tr>
<td>ST–FC-PC</td>
<td>K3024</td>
</tr>
<tr>
<td>ST–SC-PC</td>
<td>K3031</td>
</tr>
<tr>
<td>ST–F-SMA (3.175 mm)</td>
<td>K3030</td>
</tr>
</tbody>
</table>

### 9/125 µm singlemode, 2 m length

<table>
<thead>
<tr>
<th>Type</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC-PC–FC-PC</td>
<td>K3112</td>
</tr>
<tr>
<td>FC-PC–FC-APC</td>
<td>K3129</td>
</tr>
<tr>
<td>FC-APC–FC-APC</td>
<td>K3130</td>
</tr>
<tr>
<td>FC-PC–SC-PC</td>
<td>K3139</td>
</tr>
<tr>
<td>FC-PC–SC-APC</td>
<td>K3141</td>
</tr>
<tr>
<td>FC-PC–DIN 47256</td>
<td>K3101</td>
</tr>
<tr>
<td>FC-PC–E2000</td>
<td>K3132</td>
</tr>
<tr>
<td>FC-PC–E2000-APC</td>
<td>K3135</td>
</tr>
<tr>
<td>FC-PC–ST-PC</td>
<td>K3133</td>
</tr>
<tr>
<td>FC-PC–LC</td>
<td>K3140</td>
</tr>
<tr>
<td>FC-APC–DIN 47256</td>
<td>K3121</td>
</tr>
</tbody>
</table>

### 9/125 µm singlemode, 0.35 m length

<table>
<thead>
<tr>
<th>Type</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIN 47256–DIN 47256</td>
<td>K3120</td>
</tr>
<tr>
<td>FC-PC–FC-PC</td>
<td>K3123</td>
</tr>
<tr>
<td>SC-PC–SC-PC</td>
<td>K3131</td>
</tr>
</tbody>
</table>

### 9/125 µm singlemode, 0.35 m length (1)

(1) e.g. for connection between different ONT modules

Other cable types are available on request.

## Fixed attenuators/mating sleeves

### Singlemode fixed attenuators

<table>
<thead>
<tr>
<th>Type</th>
<th>Attenuation (at 1310/1550 nm)</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>FC-PC</td>
<td>3 dB</td>
<td>K3137</td>
</tr>
<tr>
<td>FC-PC</td>
<td>6 dB</td>
<td>K3138</td>
</tr>
<tr>
<td>FC-PC</td>
<td>10 dB ± 1 dB</td>
<td>K3134</td>
</tr>
<tr>
<td>FC-PC</td>
<td>15 dB ± 2 dB</td>
<td>K3100</td>
</tr>
<tr>
<td>FC-PC</td>
<td>20 dB ± 2 dB</td>
<td>K3113</td>
</tr>
<tr>
<td>SC-PC</td>
<td>3 dB</td>
<td>K3118</td>
</tr>
<tr>
<td>SC-PC</td>
<td>6 dB</td>
<td>K3110</td>
</tr>
<tr>
<td>SC-PC</td>
<td>10 dB</td>
<td>K3125</td>
</tr>
<tr>
<td>SC-APC–SC-APC</td>
<td>15 dB ± 2 dB</td>
<td>K3127</td>
</tr>
<tr>
<td>ST-PC–ST-PC</td>
<td></td>
<td>K3122</td>
</tr>
</tbody>
</table>

### Singlemode mating sleeves

<table>
<thead>
<tr>
<th>Type</th>
<th>Ferrule diameter</th>
<th>Order number</th>
</tr>
</thead>
<tbody>
<tr>
<td>DIN 47256, 2.5 mm</td>
<td>S3100</td>
<td></td>
</tr>
<tr>
<td>FC-PC, FC-APC, 2.5 mm</td>
<td>S3101</td>
<td></td>
</tr>
<tr>
<td>F-SMA, 3.175 mm</td>
<td>S3102</td>
<td></td>
</tr>
<tr>
<td>ST, 2.5 mm</td>
<td>S3109</td>
<td></td>
</tr>
<tr>
<td>SC-PC, SC-APC, 2.5 mm</td>
<td>S3111</td>
<td></td>
</tr>
<tr>
<td>E2000-PC, 2.5 mm</td>
<td>S3118</td>
<td></td>
</tr>
<tr>
<td>E2000-APC, 2.5 mm</td>
<td>S3119</td>
<td></td>
</tr>
<tr>
<td>LC, 1.25 mm</td>
<td>S3120</td>
<td></td>
</tr>
</tbody>
</table>

(1) e.g. for connection between different ONT modules
All statements, technical information and recommendations related to the products herein are based upon information believed to be reliable or accurate. However, the accuracy or completeness thereof is not guaranteed, and no responsibility is assumed for any inaccuracies. The user assumes all risks and liability whatsoever in connection with the use of a product or its applications. JDSU reserves the right to change at any time without notice the design, specifications, function, fit or form of its products described herein, including withdrawal at any time of a product offered for sale herein. JDSU makes no representations that the products herein are free from any intellectual property claims of others. Please contact JDSU for more information. JDSU and the JDSU logo are trademarks of JDS Uniphase Corporation. Other trademarks are the property of their respective holders. © 2005 JDS Uniphase Corporation. All rights reserved.