USB Input Tool Direct now features a model dedicated to each instrument type and a software option for increased spreadsheet efficiency.
USB Input Tool Direct: USB-ITN

Our USB Input Tool Direct has been streamlined into a range of dedicated models for each type of measuring instrument.

Features 1: Using USB-ITN Alone

In the same way as the existing model, IT-012U, measurement data can be input to Excel, Notepad, and other programs just by connecting the input tool to a computer.

Data collection can start immediately after connecting the measuring instrument to a computer.

The values displayed on the measuring instrument can be sent to the computer just by pressing the data switch.

Because the input tool is automatically recognized as an *HID keyboard device (a standard Windows driver) just by connecting it to a USB port, no special software is required.

*HID (Human Interface Device)

Note on using a foot switch with USB-ITN

The USB-ITPAK and USB-FSW options are required (see page opposite).

If not using optional software the IT-012U input tool can be used with a foot switch.

USB-ITN types

Each type of USB-ITN has a unique plug to fit the instrument it is designed for (figures A to G on the left). Just select the type that fits your measuring instrument (USB-ITN-A, USB-ITN-B,...). Detailed specifications, such as part numbers, are shown on page 5.

The USB plug is connected to a computer.

Supported operating systems:
Windows 2000 SP4
Windows XP SP2 or later
Windows Vista
Windows 7
USB-ITPAK measurement examples

For this measurement method, one or more measuring instruments (connected by way of USB-ITN) are used to sequentially input one data item at a time according to a procedure stored in advance.

**Measurement example**
Sequentially measuring the external diameters X and Y and length H, shown in the figure at the right, of five workpieces at a time, and then visually judging whether the external appearance is acceptable (based on damage, discoloration, and other problems).

| Dimension X | 10.025 | 10.033 | 9.964 | 10.031 | 10.046 |
| Dimension Y | 9.982 | 10.017 | 10.008 | 9.996 | 10.027 |
| Dimension H | 29.97 | 30.02 | 30.07 | 29.96 | 30.04 |

5 External appearance: OK OK NG

The cell into which the next data item will be input is shaded in green.

**Features 2: Using USB-ITN in Combination with the Optional Spreadsheet Software**

Although measurement data can be simply loaded directly into an Excel spreadsheet just by connecting the instrument and input tool to a computer, using the optional USB-ITPAK software enables time-saving operations and procedures that significantly improve reliability and efficiency.

**Measurement data collection software: USB-ITPAK® Order No. 06ADV386**
This setup and data collection software is used to input data from one or more measuring instruments (connected by way of USB-ITN) to any Excel sheet. (This software package cannot be used with IT-012U.)

**Major features**
- Excel input settings: The input destination (a workbook, sheet, or cell), cell-fill direction (right or down), cell-fill interval, and other settings can be specified.
- Measurement method selection: Any of the following three methods can be selected: Sequential measurement, batch measurement, or individual measurement. (For details, see the measurement examples.)
- Data input control: Data can be requested, canceled, or skipped by using mouse buttons, function keys, or foot switch.
- Character string input by the USB foot switch adapter, USB-FSW: Any previously specified character string can be input using the foot switch. Examples: pass or fail
- Number of units that can be connected (total number for both USB-ITN and USB-FSW): Up to 20 units can be connected for Windows Vista or Windows 7, and up to 100 units can be connected for Windows 2000 or Windows XP. However, the above numbers might be less depending on the system configuration.
- Data importation time: About 0.2 to 0.3 seconds per unit. However, this value differs depending on the connected measuring instruments and measurement environment.
- Driver software: The VCP (virtual COM port) drivers for USB-ITN and USB-FSW are individually recognized using a built-in COM number. • Patent pending (Japan)

**Various measurement patterns are supported by the three measurement modes of USB-ITPAK.**

By also using the foot switch, data input and cancellation can be performed with a single button press.

**USB-ITPAK measurement examples**

**Sequential measurement**

For this measurement method, one or more measuring instruments (connected by way of USB-ITN) are used to sequentially input one data item at a time according to a procedure stored in advance.

1. A micrometer is used to measure the external diameters X and Y of five workpieces.
2. A caliper is used to measure the length H of five workpieces.
3. The workpieces are visually examined for problems such as damage and discoloration, and then OK or NG (not okay) is input.

**USB foot switch adapter: USB-FSW**

No.06ADV384

Total length: 160 mm

**Major specifications**

The foot switch function can be specified with USB-ITPAK and used accordingly.

1. Data control: Data Request, Data Cancellation, and Data Skip
2. Inputting any character string: Examples - pass, fail, OK, NG
For this measurement method, data is imported in batches from multiple measuring instruments (connected by way of USB-ITN).

**Measurement example**
Measuring the height of a workpiece at the four positions A to D in batches (at the same time) as shown in the figure below.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Height A</td>
<td>5.02</td>
<td>4.98</td>
</tr>
<tr>
<td>B</td>
<td>8.03</td>
<td>8.02</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>9.96</td>
<td>10.01</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>6.03</td>
<td>5.99</td>
<td></td>
</tr>
</tbody>
</table>

**External appearance of USB-FSW**

For this measurement method, multiple operators make random measurements, and then data is input from the corresponding measuring instruments (by way of USB-ITN) according to individually specified input procedures. • Patent pending (Japan)

**Measurement example**
Dividing six workpieces into two groups of three, one of which is measured by each of two operators (parallel work).

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>A</td>
<td>Dimension A</td>
<td>10.02</td>
<td>10.03</td>
<td>9.96</td>
<td>10.15</td>
</tr>
<tr>
<td>B</td>
<td>10.03</td>
<td>10.01</td>
<td>10.07</td>
<td>10.15</td>
<td>10.23</td>
</tr>
<tr>
<td>D</td>
<td>10.15</td>
<td>10.14</td>
<td>9.96</td>
<td>10.27</td>
<td></td>
</tr>
</tbody>
</table>

**Notes on using USB-ITPAK**
- Do not merge the cells within the range of cells specified as input destinations for measurement data.
- During measurement, do not perform operations on the Excel sheet you are using other than data input work stored in the measurement procedure. To write data, the measurement Pause or Stop button must be clicked.
USB bus power

Output specifications: USB 2.0 or 1.1
Communication speed: 12 Mbps (full speed)
Power supply: USB bus power

Mass: 59 g
USB 2.0 certification obtained
Complies with the EU EMC Directive

Note: It is recommended to use a commercially available USB hub that has USB certification.

Codes for the main measuring instruments classified according to the USB Input Tool Direct code, part number, and plug type

Determine the plug type suitable for your measuring instrument (one of the seven types from A to G) in the following table, and then select the corresponding USB Input Tool Direct.

<table>
<thead>
<tr>
<th>Model</th>
<th>USB-ITN-A</th>
<th>USB-ITN-B</th>
<th>USB-ITN-C</th>
<th>USB-ITN-D</th>
<th>USB-ITN-E</th>
<th>USB-ITN-F</th>
<th>USB-ITN-G</th>
</tr>
</thead>
<tbody>
<tr>
<td>Order No.</td>
<td>06ADV380A</td>
<td>06ADV380B</td>
<td>06ADV380C</td>
<td>06ADV380D</td>
<td>06ADV380E</td>
<td>06ADV380F</td>
<td>06ADV380G</td>
</tr>
</tbody>
</table>

USB connector (A plug)

- Illustration (Example: USB-ITN-A)

USB-ITPAK usage environment

Supported operating systems:
- Windows 2000 SP4, Windows XP SP2 or later, Windows Vista, and Windows 7

Supported Excel versions:

Supported USB devices:
- Hard disk: At least 20 MB of free space required for installation
- CD-ROM drive: Required for installation
- USB ports: At least two ports (for the USB dongle and USB-ITN)

Resolution:
- At least 800 x 600 pixels, and at least 256 displayable colors

- 64-bit operating systems are not supported.
- The natural language selected in USB-ITPAK must be the same as that used in the operating system.

Measuring instrument models that incorporate a data switch

Measuring instrument models that do not have a data switch

No corresponding models

No corresponding models
Note: All information regarding our products, and in particular the illustrations, drawings, dimensional and performance data contained in this pamphlet, as well as other technical data are to be regarded as approximate average values. We therefore reserve the right to make changes to the corresponding designs, dimensions and weights. The stated standards, similar technical regulations, descriptions and illustrations of the products were valid at the time of printing. Only quotations submitted by ourselves may be regarded as definitive.