

Measurement Data Management

Convenient data collection tool and quality control software

Digimatic Gage/PC Data Input Device USB Input Tool Direct USB-ITN

A data collection tool that offers simple and popular operability (HID connection) and optional software to input data to Microsoft Excel at a reasonable price. A more sophisticated way to improve operational efficiency.

Use USB-ITN standalone as a dedicated interface for Digimatic indicators compatible with HID keyboard devices.

In common with the popular model IT-016U, this device is capable of entering measurement data to Microsoft Excel or a memo pad. Application example: using USB-ITN standalone to input data while selecting the data entry point flexibly during a measurement whose procedures cannot be determined in advance (such as the inspection of items or trial products with few measurements or without repeated procedures).

Using USB-ITN in combination with dedicated options

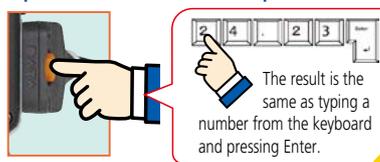
Refer to pages A-22 to A-24 for details.

If you need more than just the ability to load the measurement data to Excel, the optional software **USB-ITPAK** can create a data input procedure to an Excel sheet to improve the operational efficiency of repeated inspections. Application example: using USB-ITN in combination with **USB-ITPAK V2.1** to improve the operational efficiency of daily inspections such as sampling tests or complete inspections of mass-produced product.



USB-ITN

Input data to the PC with the push of a button.



Just press the data button to send the displayed value to the PC.

Can be connected directly to a USB port on a PC with 1 cable.

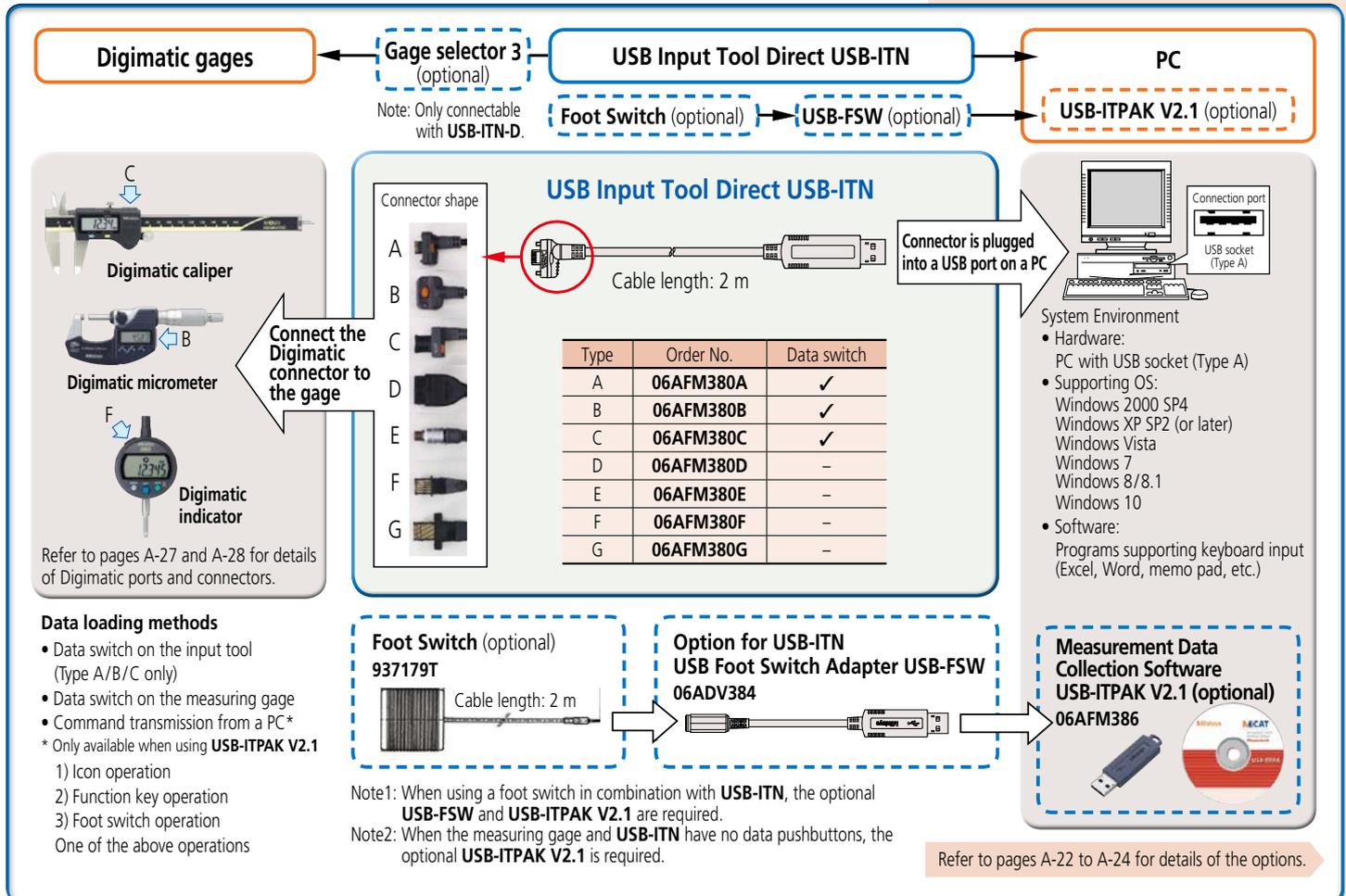
USB Input Tool Direct
USB-ITN-B

USB Input Tool Direct is automatically recognized as a HID* keyboard device (standard driver of Windows) by connecting it to a USB port.
* Human Interface Device

Main specification

- Output compatibility: USB1.0 or USB2.0
 - Supporting driver software: Switchable between 2 items below
 - 1) When using standalone: HID keyboard device*
 - 2) When using with **USB-ITPAK V2.1**: Virtual COM port (VCP)
 - Communication speed: 12 Mbps (Full Speed)
 - Power supply: USB bus power
 - Mass: 59 g
 - USB2.0 certificate
 - Conforms to EU EMC Directives.
- * Since this device is compatible with Windows standard driver software, dedicated driver software is not required.

USB-ITN System Configuration

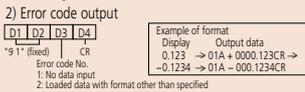
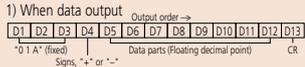


Specifications of IT-007R RS-232C Communication

- Output specification: RS-232C compliant
- Communication method: Full duplex
- Communication speed: 2400 bps (fixed)
- Bit configuration: Start bit 1
Data length 8
(Most significant bit, 0 (fixed))
Parity, None
Stop bit 1

Flow control: None
Home position: DCE (modem definition)

• Data format



• Data request signal

Data can be output by transmitting a character from the PC.

• Connector specification and power supply from the PC

This product operates while accumulating the power supplied from the PC. A second or more input interval is required.

Pin No.	Symbol	in/out	Description of functions
1	(N.C.)	—	No connection
2	RXD	OUT	Data output from this product to the PC
3	TXD	IN	Data input from the PC to this product
4	DTR	IN	+12 V power supply from the PC*
5	GND	—	Ground
6	DSR	OUT	Not used
7	RTS	IN	+12 V power supply from the PC*
8	CTS	OUT	Not used
9	(N.C.)	—	No connection

* "4" and "6", "7" and "8" are connected with each other inside this product.
When connecting to a sequencer, a power supply is required.
Input voltage: Supplied in the range 6 V to 16 V
Power supply terminal: Supplied to pins 4 and 7

Measurement Data Input Unit Input Tool SERIES IT-016U/IT-007R

USB Keyboard Signal Conversion Type IT-016U

The IT-016U, a popular USB input tool that enables easy data recording. Allows you to perform inspection work more efficiently.

The IT-016U is equipped with a connector socket for a push-button or switch-foot operation.

Functional improvements include:

- A bigger, easy-to-press data switch. Size increased from $\phi 4$ mm to $\phi 18$ mm. Durability of the push button increased from 1 million to 10 million operations.
- May be used with optional software **USB-ITPAK V2.1**. Enables efficient routine inspection work, for example, in mass production.

RS-232C Communication Conversion Type IT-007R

Input tool for RS-232C communication best suited for communication control of the software!

Control is available by transmitting data request commands via RS-232C.

For example, production engineers can create communication programs to load the measurement data by transmitting a command from the PC.

This product is a compact and low-cost RS-232C communication interface, which is convenient when it is installed in a machine tool or dedicated device to feed back measurement data.

Main Specifications of IT-016U

Supported driver software: Changeable between two types

Output specification: USB2.0 or USB1.0

1) Stand-alone: HID keyboard device*

2) Using **USB-ITPAK V2.1**: Virtual COM port (VCP)

Communication speed: 12 Mbps (Full Speed)

Power supply: USB bus power

USB2.0 certificate

Conforms to EMC Directives

* This product is compatible with the standard driver software for Windows. No dedicated driver software is required.



IT-016U



IT-007R



The HID* keyboard device (standard driver software for Windows) is **automatically recognized** when connected to a USB port.

* HID (Human Interface Device)

IT-016U/IT-007R System Configuration

