

# FT/IR-4X

## Fourier Transform Infrared Spectrometer



## Specifications

### [Hardware]

Measurement wavenumber range: 7800 to 350  $\text{cm}^{-1}$

Measurement wavenumber  
extended range <sup>\*1</sup> (optional): 11500 to 375  $\text{cm}^{-1}$  (NMIR-4X)  
6000 to 220  $\text{cm}^{-1}$  (MFIR-4X-N)  
6000 to 50  $\text{cm}^{-1}$  (MFIR-4X-W)

Resolution: 0.4, 0.5, 1.0, 2, 4, 8, 16  $\text{cm}^{-1}$

Signal-to-noise ratio <sup>\*2</sup>: 35000 : 1

Detector:

Standard: DLATGS (with peltier temperature control)

Optional: MCT-N, MCT-M, MCT-W, MCT-PV, InGaAs, Broad band DLATGS <sup>\*3</sup>, PAS  
(PC switching, User exchangeable)

Beam splitter:

Standard: Ge/KBr

Optional: Broad band KBr, Mid-far IR broad band (not interchangeable)

Light source:

Standard: High-intensity ceramic source

Optional: Halogen lamp (PC switching)

Interferometer:

45 degrees Michelson interferometer with corner-cube mirror,  
sealed structure (KRS-5 window), auto-alignment mechanism, DSP control

Purging:

Standard: Sample/detector compartment

Optional: Interferometer

A/D converter: 24 bit A/D converter

Drive method: Mechanical bearing, electromagnetic drive

Drive speed: 1, 2, 3, 4 mm/sec.  
Rapid scan: 32, 64 mm/sec.

Rapid scan <sup>\*4</sup> (optional): 80 spectra/sec. (16  $\text{cm}^{-1}$  resolution)

Communication: USB 2.0

Vibration-proof: Vibration-proof design mounting

iQX accessory: Standard

Start button: Standard

Dimensions and weight	386 (W) × 479 (D) × 254 (H) mm, 18 kg
Required power	AC 100 to 240 V, 50/60 Hz, maximum 50 VA
Operation environment	Temperature: 17 to 27 °C / humidity: less than 70 %

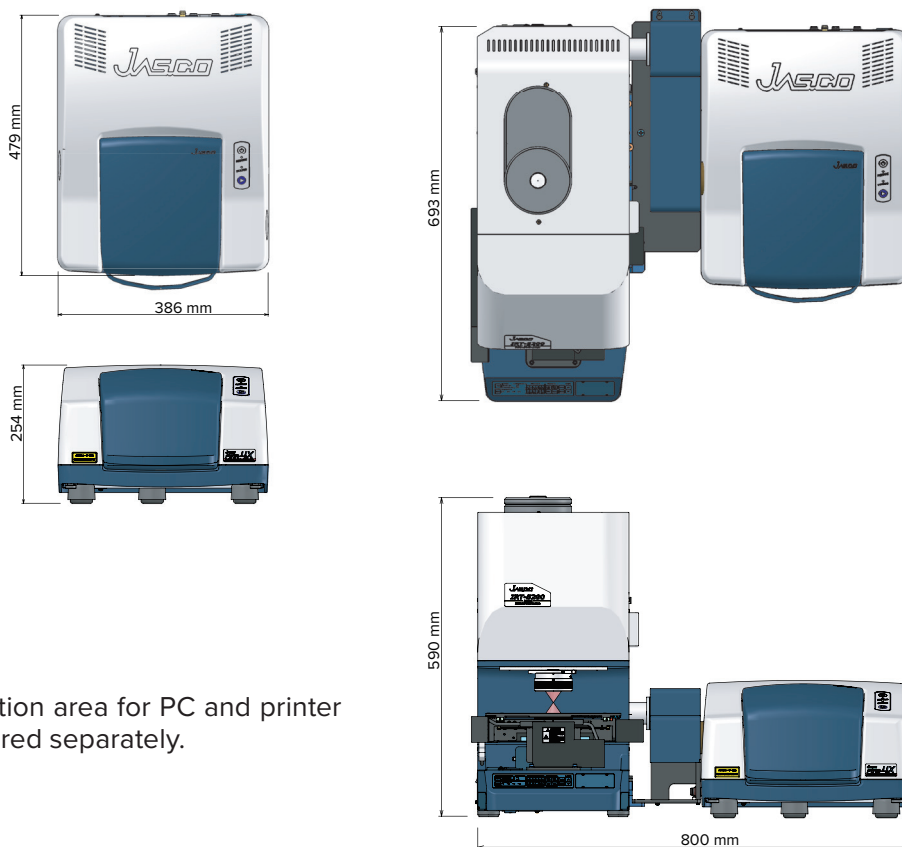
[Data processing]

Software: JASCO Spectra Manager Ver.2.5 \*5

Operating system: Windows 10 Pro (64-bit)

- \*1 One of three options (near-mid IR region, mid-far IR region) should be selected when extending the measurement wavenumber range.
- \*2 Measurement condition: 4 cm<sup>-1</sup> resolution, 1 minute accumulation, near 2200 cm<sup>-1</sup>, P-P
- \*3 Broad band DLATGS is installed instead of DLATGS as standard detector when selecting the far IR extension option.
- \*4 Performance of rapid scan function was evaluated when installing Ge/KBr beam splitter. MCT detector is also required.
- \*5 JASCO can provide Spectra Manager Ver.2.5 CFR which is compliant with FDA 21 CFR PART 11.

<Instrument dimensions>



\* Installation area for PC and printer is required separately.

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Products described herein are designed and manufactured by ISO-9001 and ISO-14001 certified JASCO Corporation



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