

INNO-S

Multimode Microplate Reader
(Absorbance, Luminescence, Fluorescence)



Description

- Filter-based Fluorescence with diverse wavelength selection
- TRF (Time-Reserved Fluorescence)
- Xenon flash lamp & High Power LED
- Incubation and Shaking

Certifications

- IVD
- CE Marked
- RoHS
- ISO 9001 / ISO 13485 / ISO 14001
- 21 CFR Part 11 Compliance Software

Specification

General (Multimode Microplate Reader)

Detection modes	UV-Vis Absorbance / Fluorescence Intensity / Luminescence TRF (Time-Resolved Fluorescence)		
Read methods	End point, Kinetic, Spectral scanning, Well-area scanning		
Microplate types	6- to 384-well plates		
Others	NANO-VC (Microvolume Plate), INNO-QM (Quality Check Plate)		
Temperature control	Up to 50 °C ± 0.2°C at 37°C		
Shaking	Linear & Orbital & Double Orbital with 4 different speeds		
Software	INNO-X™ (Basic software) & INNO-XS™ (21 CFR part 11 Compliance Software) (Optional)		

Absorbance

Light source	Xenon flash lamp	Pathlength correction	Yes
Detector	Photodiode	Monochromator wavelength accuracy	±2 nm
Wavelength selection	Monochromator	Monochromator wavelength repeatability	±0.2 nm
Wavelength range	200 ~ 999 nm, 1nm increments	OD linearity	<1% from 0 to 3.0 OD
Dynamic range	0 ~ 4.0 OD	OD repeatability	< 0.5% at 2.0 OD
Resolution	0.0001 OD		

Fluorescence Intensity			
Filter-based Fluorescence Intensity			
Light source	High Power LED	Wavelength range	350 ~ 750 nm (Options 850nm)
Detector	PMT	Dynamic range	>6 decades
Wavelength selection	Filters	Sensitivity	Top and Bottom : Fluorescein 5 pM (1 fmol/well, 96-well plate)

Luminescence			
Wavelength range	200 ~ 700 nm (Options 850nm)	Sensitivity	10 amol ATP (filter)
Wavelength selection	Filters	Dynamic range	>7 decades
Detection system	Low noise PMT	Peak wavelength	410 nm

TRF (Time-Resolved Fluorescence)		Temperature control & Shaking	
Light source	High Power LED	Temperature control	Up to 50 °C ± 0.2°C at 37°C
Detector	Filters	Shaking	Linear & Orbital & Double Orbital with 4 different speeds
Wavelength selection	PMT		

Physical Characteristics			
Connectivity	1 USB, 1 RS232 for external PC control	Dimensions	408W x 390L x 290H
Power	100-240 Volts AC. 50/60 Hz	Weight	18.2 kg

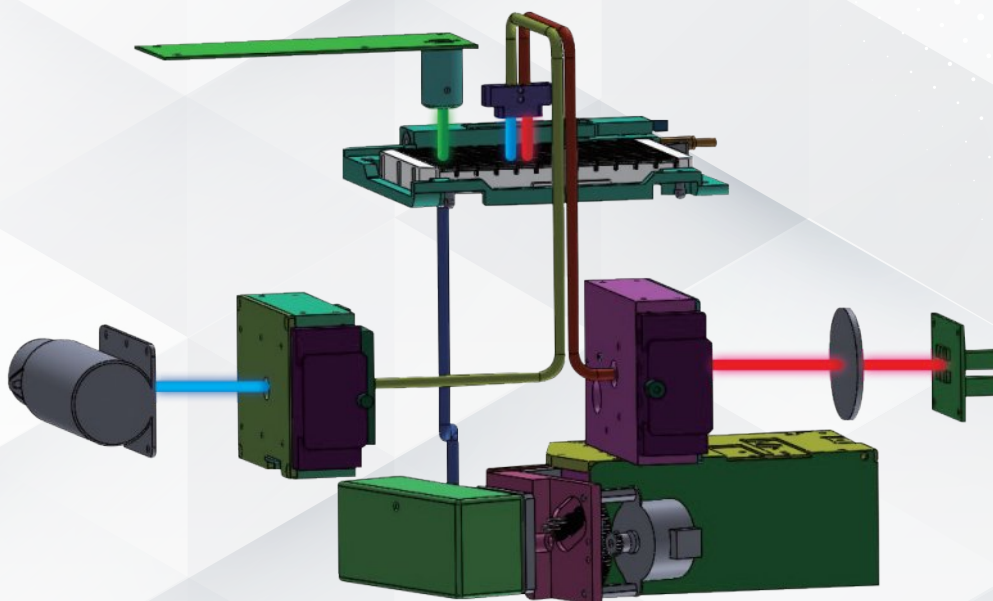
Applicable Optional Products	
Reagent Injector (INNO-D)	• 2 Syringe pumps • 5 ~ 1,000μ → 15 ~ 1,000μ • Minimum prime Vol. 1.1mL, 100μL with back flush
Microvolume Plate (NANO-VC)	• Nucleic acid and protein quantification with DNA/RNA, Lysozyme, dsDNA, ssDNA, Etc. • 2-2.5μL sample capacity with 24 wells • 2.5ml cuvette holder
Quality Check Plate (INNO-QM)	• Absorbance linearity and accuracy QC • Luminescence linearity QC • Fluorescence linearity QC

INNO-S Product line Configurations			
	INNO-S	INNO-SA	INNO-SF
Absorbance	0	0	
Fluorescence	0		0
Luminescence	0		0
TRF	0		0
Shaking	0	0	0
Incubation	0	0	0
Dual Reagent Injector	0	0	0

※The user can select TWO filter sets by default when purchasing the INNO-S(F) model

INNO-S™

Monochromator and filter optics



LTEK's INNO-S is an innovative Multimode Microplate Reader for Absorbance, Luminescence, and Fluorescence. It is designed for various applications, making it a versatile device for your research. It offers a broad wavelength spectrum and the convenience of using a monochromator to eliminate the need for filter selection. It uses a xenon flash lamp, known for its long life and durability, for semi-permanent use. It offers four types of read methods, Incubation and Shaking mode. For the user's convenience, LTEK has prepared the INNO-SA subline for Absorbance and the INNO-SF subline for Fluorescence and Luminescence only.

With user-friendly software included as standard, LTEK's INNO-S allows you to easily optimize all settings in your experiments. Optional nanovolume plates and quality check plates are available for your convenience. Experience accurate measurements for a wide range of experiments, all at an affordable price.

Main Features

- 01 Multimode (Absorbance + Luminescence + Fluorescence)
- 02 Monochromator-based UV-Vis Absorbance
- 03 Filter-based Fluorescence with diverse wavelength selection
- 04 TRF (Time-Reserved Fluorescence)
- 05 Cell friendly orbital Shaking and advanced Incubator design up to 50°C
- 06 2µL low volume nucleic acid & protein quantification with NANO-VC™ Plate (Option)
- 07 Provides INNO-X™ software with unlimited license & free software upgrade, and INNO-XS (21 CFR Part 11 Compliance)

INNO product line series configuration chart

	INNO	INNO-M	INNO-SA	INNO-SF	INNO-S	INNO-HD	INNO-HM	INNO-HML	INNO-H
Absorbance (Monochromator)	0	0	0		0		0	0	0
Luminescence (Filter)		0		0	0	0			0
Luminescence (Monochromator)								0	0
Fluorescence (Filter)				0	0	0			0
Fluorescence (Monochromator)							0	0	0
TRF				0	0	0	0	0	0
Dichroic Intensity						0			0
Fluorescence Polarization						0			0
Shaking	0	0	0	0	0	0	0	0	0
Incubation			0	0	0	0	0	0	0
Dual Injector			0	0	0	0	0	0	0

Optional Accessories



INNO-Q (Option)

- Absorbance Quality Check Plate for accuracy, linearity, and alignment

INNO-QM (Option)

- Absorbance, Luminescence, and Fluorescence Q.C plate
- Abs – 9 Wells: 0.14 to 2.2 OD @ 450 nm
- Fluo – 8 wells: Read EX 485 nm / EM 530 nm or EX 540 nm / EM 590 nm
- Lumi – 9 wells: Approximate four-decade dynamic range standard

NANO-VC (Option)

24 Wells DNA/RNA/Protein Quantitative Measurement

Using 2 μ L of DNA/RNA samples, quantitative measurement is possible. This also helps the users to understand or interpret the unknown or unspecified samples by measuring from 240 to 320 nm with 2 nm steps. A total of 2 μ L 24 wells allow you to measure variety types of samples at the same time.

dsDNA, RNA, ssDNA, 1Abs at 1cm = 1 mg/ml

BSA, IgG, Lysozyme, and other samples are measurable.

Specification

2 μ L Sample capacity	24 wells
Cuvette capacity	1 slot
Cuvette size	2.5 ml tube
Compatible model	All LITEK Microplate Reader series
Optical path length	0.5 mm
Detection limit	2 ng/pl dsDNA

