



QX We recommend QX Series, which provides an excellent water quality analysis function. **Water Quality Analyzer**

QX Series

QX is designed for environmental researchers, facility managers, environmental engineers, and water treatment professionals to perform essential water quality analyses quickly and accurately. Featuring voice guidance and hundreds of pre-programmed water testing methods, QX enables simple and reliable analysis of key parameters such as COD, TN, and TP.



Equipped with a high-precision Czerny–Turner monochromator and advanced signal processing technology, QX delivers a fast scanning speed of up to 4000 nm/min and a spectral bandwidth (SBW) of ≤ 1.8 nm.

It ensures low noise and high photometric accuracy (± 5 mAbs or 1%) with excellent repeatability (within ± 3 mAbs). Each instrument is performance-verified using NIST SRM 935a and SRM 930e standard reference materials.

Measurement results of SRM 935a in 0.001 M perchloric acid solution (60 mg/L)

Wavelength	235.0	257.0	313.0	350.0
Certified Value	0.7472	0.8637	0.2935	0.6411
Measured(Mean)	0.740	0.856	0.292	0.641
Measured(Std)	0.000	0.000	0.000	0.000

Wavelength	440.0	465.0	546.1	590.0	635.0
Certified Value	1.0218	0.9610	0.9983	1.0938	1.0738
Measured(Mean)	1.022	0.961	0.998	1.094	0.074
Measured(Std)	0.000	0.000	0.000	0.000	0.000

User Experience

1. Dedicated water analysis functions with pre-installed methods for major test kits
2. Instant analysis by simply selecting built-in methods without complex setup

Convenience

1. All-in-one cell holder allowing the use of multiple cell types without holder replacement
2. Wide cell compatibility (10 mm / 1-inch square cells, 16 mm / 25 mm round tubes)
3. Voice guide function providing step-by-step instructions for test procedures

Efficiency

1. Favorite function for quick access to frequently used methods and measurement data
2. Convenient data printing and reporting via network printer connectivity
3. Online software updates to maintain the latest features

H Method

Parameter	Range	Unit
N, Nitrate HRTNT	0.0	30.0 mg/L
N, Total HRTNT	0	150 mg/L
N, Total LRTNT	0.0	25.0 mg/L
P,React.HRTNT	0.0	100.0 mg/L
Molybdenum HRAV	0.0	40.0 mg/L
P.Total HRTNT	0.0	100.0 mg/L
N, Ammonia Ness.	0.00	2.50 mg/L
P,React.Mo AV	0.0	45.0 mg/L
N, Nitrate MRAV	0.0	10.0 mg/L
N, Nitrate MRPP	0.0	10.0 mg/L
N, Nitrite HRPP	0	250 mg/L
Iron, Ferro/Mo	0.00	1.80 mg/L
Iron, TPTZ	0.000	1.800 mg/L
Iron, TPTZAV	0.000	1.800 mg/L
Manganese,LR	0.005	0.700 mg/L
Silica, HR	0.0	100.0 mg/L
Chloride	0.0	25.0 mg/L
Hydrazine	0	600 ug/L
Hydrazine AV	0	600 ug/L
N, Nitrate LR	0.00	0.50 mg/L
N, Nitrate LRAV	0.000	0.300 mg/L
N, Nitrite LRPP	0.000	0.300 mg/L
N, Nitrite LRTNT	0.000	0.500 mg/L
Iron, FerroVer	0.00	3.00 mg/L
Iron, FerroVer AV	0.00	3.00 mg/L
Permnan. Index HR	4.50	15.00 mg/L
Aluminum Alumin.	0.000	0.800 mg/L
Hardness, Ca	0.00	4.00 mg/L
Hardness, Mg	0.00	4.00 mg/L

M Method

Parameter	Range	Unit
Acid capacity CT to pH4.3	0.40	8.00 mmol/L OH
Acid capacity CT to pH4.3	20	400 mg/L CaCO ₃
Aluminium Test	0.10	1.20 mg/L Al
Aluminium Test	0.020	0.200 mg/L Al
Aluminium CT	0.02	0.50 mg/L Al
Aluminium CT	0.02	0.50 mg/L Al
Ammonium CT	0.010	2.000 mg/L NH ₄ N
Ammonium CT	0.010	2.000 mg/L NH ₄ N
Ammonium CT	0.01	2.58 mg/L NH ₄ +
Ammonium CT	0.01	2.58 mg/L NH ₄ +
Ammonium CT	0.010	2.000 mg/L NH ₃ N
Ammonium CT	0.010	2.000 mg/L NH ₃ N
Ammonium CT	0.01	2.43 mg/L NH ₃
Ammonium CT	0.01	2.43 mg/L NH ₃
Ammonium Test	0.05	3.00 mg/L NH ₄ N
Ammonium Test	0.03	1.50 mg/L NH ₄ N
Ammonium Test	0.010	0.500 mg/L NH ₄ N
Ammonium Test	0.06	3.86 mg/L NH ₄ +
Ammonium Test	0.04	1.93 mg/L NH ₄ +
Ammonium Test	0.013	0.644 mg/L NH ₄ +
Ammonium Test	0.05	3.00 mg/L NH ₃ N
Ammonium Test	0.03	1.50 mg/L NH ₃ N
Ammonium Test	0.010	0.500 mg/L NH ₃ N
Ammonium Test	0.06	3.65 mg/L NH ₃
Ammonium Test	0.04	1.82 mg/L NH ₃
Ammonium Test	0.016	0.608 mg/L NH ₃
Ammonium CT	0.20	8.00 mg/L NH ₄ N
Ammonium CT	0.20	8.00 mg/L NH ₄ N
Ammonium CT	0.26	10.30 mg/L NH ₄ +

Hu Method

Parameter	Range	Unit
HSODUR	5	40 mg/L
HSODLR	15	150 mg/L
HSODMIR	50	1500 mg/L
HSOD(Mh)L	0.6	20 mg/L
HSOD(Mh)U	0.2	3 mg/L
HSINU	0.2	5 mg/L
HSINL	2.5	20 mg/L
HSINH	10	100 mg/L
HSINL(CA)	1	50 mg/L
HSINH(CA)	10	100 mg/L
HSIPL	0.01	3 mg/L
HSIPH	1	15 mg/L
HSNO ₂ (N)L	0.1	1 mg/L
HSNO ₂ (N)H	10	150 mg/L
HSNO ₃ (N)H	1	15 mg/L
HSNO ₃ (N)L	0.2	10 mg/L
HSNO ₃ (N)CA	0.5	30 mg/L
HSNH ₃ (N)L	0.2	6 mg/L
HSNH ₃ (N)U	0.03	1 mg/L
HSPO ₄ (P)L	0.01	3 mg/L
HSPO ₄ (P)H	1	15 mg/L
HSOD(Mh)H	20	100 mg/L
HS Mn	0	20 mg/L
HSNH ₃ (N)H	2	60 mg/L
HSAl	0.01	0.3 mg/L

- The listed water analysis methods represent only a portion of the available methods.
- For detailed information, please contact K LAB Co., Ltd.

Specifications

Photometrics System	Single-beam type	Baseline Stability	<0.001 Abs/h
Light Source(s)	Tungsten Halogen Lamp & Deuterium Lamp		(700 nm, after one hour warm-up)
	(Built-in light source auto interchanging motor)	Baseline Flatness	<0.001 Abs rms
Detector	Silicon Photodiode		(200 to 1,100 nm, after one hour warm-up)
Spectral Bandwidth	< 1.8 nm	Stray Light	< 0.05 % (at 220 nm with 0.1% NaI)
Wavelength Range	190 to 1,100 nm		< 0.05 % (at 340 nm with 0.5% NaNO ₂)
Wavelength Display (setting)	0.1 nm	Monochromator	Czerny-Turner Monochromator
Wavelength Accuracy	<± 0.5 nm	Standard Cell Holder	All-in-one cell
Wavelength Repeatability	<± 0.1 nm	Lamp Interchange Wavelength	340 to 410 nm (Default 370 nm)
Slew Rate	7,800 nm/min	Operating System (OS)	Android
Scanning Speed	4,000 nm/min	Display	7-inch (Resolution: 1280 x 800)
Photometric Display	Absorbance : -3 A to 3 A	Control Options	Stand-alone, PC
	Transmittance : 0 % to 300 %	Dimensions(W*D*H)	433 mm * 381 mm * 180 mm
Photometric Range	3 Abs	Power Requirement	AC100 to 240 V, 50/60 Hz, 140 VA
Photometric Accuracy	<± 0.005 Abs at 0.0 to 0.5 Abs	Weight	10.5kg
	<± 1% Abs at 0.50 to 2.0 Abs	Preprogrammed Method	> 130 (Hach), > 480 (Merck)
	(NIST SRM 930e)	PC Software	(optional) View for Windows
Photometric Repeatability	± 0.003 Abs	Connectivity	RJ45 ethernet, USB A * 2, RS-232 * 2, USB * 1

The H mode, M mode, and Hu mode incorporate independent calibration curves designed for compatibility with reagent specifications manufactured by Hach®, Merck, and Humas, respectively. Hach®, Merck, and Humas are registered trademarks of their respective owners. K LAB Co., Ltd. is not affiliated with or endorsed by these trademark holders.

Duksan Mecasys CO., LTD.

Address

Dongtan Central A-Star Tower B-312, 590, Dongtangiheung-ro,
Hwaseong-si, Gyeonggi-do, Republic of Korea 18469

Website

www.dsmecasys-eng.com

Telephone / Fax

+82.70.8633.0860 / +82.2.2627.3737

Contact

brian@dsmecasys.com (Overseas Business)

