APS-1623W-x Aquaphotomics System

Handheld Aquaphotomics Spectrophotometer with Free Choice of Light Frequency and Intensity



Key Benefits:

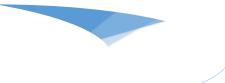
- Wavelength range in 2-nd and 3-rd overtones of water (660nm to 970nm)
- LEDs light source at 16 water absorbance ranges
- Choice of light frequency and intensity
- Light perturbation mode
- Real time monitoring
- Non destructive testing of samples
- Diffuse reflection measurements
- Optional modules for transmission measurements
- Optional 10, 20, 50 mm cuvette holders
- Optional probe for bioreactor process monitoring
- Suitable for field measurements
- USB and Bluetooth connection
- PC, tablets and smartphones control
- No moving parts Robust
- Compact design
- Easy to use
- High "performance to price" ratio

Target applications:

- Food and agriculture
- Pharmaceutical
- Environmental
- Cosmetics

Target models:

- Diagnostics of oxidative stress, inflammation on cellular and body level
- Human body hydration
- Water quality and water functionality evaluation
- Bio and aqueous solution monitoring and quality evaluation
- Milk freshness, milk origin authenticity evaluation
- Disease diagnosis using urine, blood, milk spectra
- Bacteria identification, bacteria growth phase prediction
- Fermentation process monitoring and stage identification
- Bio molecule (protein, sugar etc.) isomer identification
- Estrus (pregnancy) detection



APS-1623W-x Aquaphotomics System

Technical Specification:

Specifications are subject to change notice.

Illumination source:	Integrated LEDs	
Measurements:	Diffuse reflection or Transmission	
Wavelength Range:	Water absorbance bands	
	in the range of 660 ÷ 970 nm	
Wavelength Selection:	Automatic	
Detector:	Silicon photodiode	
Photometric Measuring Range:	0 ÷ 3 Abs	
Photometric Accuracy:	± 0.005 Abs @ 1.5 Abs Nominal	
Photometric Linearity:	± 0.002 Abs (0 - 3 Abs)	
Reproducibility:	± 0.005 Abs (0 - 3 Abs)	
Sample Cell Compatibility:	Cuvette, 10, 20 or 50mm pathlength	
	(with optional liquid module)	
Interface:	Bluetooth or PC via USB - Mini	
Power Supply:	USB or External Adapter, 5V DC / 0.5A	
	& Li ION battery 3.6V/1.2Ah	
Operating Temperature:	10 ÷ 40°C	
Operating Humidity:	max 80% relative humidity	
	(non-condensing)	
Storage Conditions:	-20 ÷ 60°C, max. 80% relative humidity (non-condensing)	
Dimensions (L x W x H):	115 mm x 60 mm x 85 mm	
Weight:	0.275 kg	
Enclosure Rating:	IP40	

Ordering information: Base models:

AF	PS-1623W-x	- ordering code
x- is the type of the optical head:		
		l 17.5mm diameter
**	M - mini 12mm diameter	
**	B4 - with four fib	ers
*	CD- Custom des	signed

Liquid cuvette module:

APS-1623W-x-LCM - ordering code (optional)

LCM - with holders for cuvettes: 10, 20, 50mm pathlength

Contact: <u>https://dtk-electronics.com</u>