

SPECIFICATIONS

Visualize live cell function at scale with Pixel

The Pixel™ System enables high-resolution, multiplexed, real-time assessment of live-cell characteristics, providing deeper understanding of how chemical or genetic perturbations affect cell function. Pixel consists of plate and reader options to suit your application with different throughputs from low-throughput research to high-throughput screening.

SPECIFICATIONS

PIXEL READER CONFIGURATIONS

Product Name	Pixel Primo	Pixel Octo
Plate Capacity	1 plate per reader	8 plates per reader
Well Count per Plate	96 or 384	96 or 384
Operation	In-incubator	Benchtop
Environment Control	Temperature	Temperature, CO ₂ /O ₂ , & humidity
Dimensions (l x w x h)	38.1 cm x 14.6 cm x 8.9 cm	60.0 cm x 32.5cm x 58.5 cm
Data Storage	CytoTronics-AWS cloud	
Connection Speed	Ethernet 1 Gbps	
Local Device Storage/Buffer	512 Gb	4,096 Gb
Acquisition Software	Pixel Pro	

PIXEL MICROPLATE SPECIFICATIONS

Product Name	Pixel Plate 96	Pixel Plate 384
Well Count	96	384
Max Well Volume	≥300 µL	≥80 µL
Recording Area	≥3.5 mm x 3.5 mm	≥1.5 mm x 1.5 mm
Electrode Count	≥78,400 per well	≥14,400 per well
Electrode Pitch	12.5 µm	
Impedance Range	100 Hz - 100kHz	
Electrophysiology Channels	144	36
Stimulation Electrodes	Arbitrary electrode groups (up to 4 programmable channels)	
Sampling Rate	10 - 100 kHz	10 - 100 kHz
Cardiac Contractility	1 kHz (1 ms response), concurrent with electrophysiology	
Electrochemistry	0.0 V - 2.0 V/10 pA - 1 µA	
Electrochemistry Electrodes	Arbitrary electrode groups (up to 4 programmable channels)	

PIXEL OCTO



PIXEL PRIMO

BENEFITS

- Multiplexed live-cell readouts
- Single-cell resolution
- Scale without compromise
- Seamless integration with other systems
- Built to scale with cloud services

APPLICATION MODULES

- Electrical imaging (impedance)
- Cardiac function (electrophysiology & contractility)
- Neural function (electrophysiology)
- Manipulation (patterning & stimulation)
- Redox electrochemistry

SELECTED APPLICATIONS

- Endothelial & epithelial biology
- Cancer cell biology
- Mechanism of action/toxicology
- Stem cell biology
- Cardiac function
- Neuron function



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