

Raytrix Lightfield System



Compact, battery-powered, datalogging system for Raytrix lightfield camera

1000 meter depth rating
Pico-ITX 1.6 GHz, dual-core CPU
High capacity Li-Ion batteries
784 Whr battery power
LED lighting
Raytrix R5 lightfield camera

Fully compatible with Raytrix API and RxLive.
Datalogging software for autonomous Light and camera control
Sapphire optical port
Visual display of system status and battery charge



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System Specifications

Operating Temperature	0 C - 50 C
Runtime	> 10 hours
Power Output for Lights	24VDC @ 4A Max
Auxiliary Serial Interface	RS-232
Wired Network Interface	Gigabit Ethernet
Wireless Network Interface	802.11 B/G/N (Wifi through Delrin Cap)
External ON/OFF Master Switch	Dummy Plug
Dimming Control for Lights	10% to 100% through PC interface

Battery Enclosure

Available Energy	712 Watt-Hours
Number of 14.4V 6.2Ah Li Ion smart packs	8
Battery Chemistry	High-Capacity Lithium Ion
Nominal Battery Voltage	14.4V
Regulated Output Voltage	24V (10A)
Charge Voltage	22VDC
Charge Time (10% to 100%)	7 hours
Dimming Control for Lights	10% to 100% through PC interface
Mechanical Properties	1000 m pressure rating, 6061 Anodized Aluminum
Physical Properties	37 lb air weight, 10 lbs seawater weight Overall Size: 22.5 x 9 inches Housing Size: 16.5 x 9 inches

Electronics Enclosure

CPU	1.6 GHz dual-core Intel Atom
RAM	4GB
Storage	512 GB Solid State Drive
LAN	Omnitron 4-Port Gigabit Switch
Serial I/O	RS-232
Wireless	802.11 B/G/N
Mechanical Properties	1000 m pressure rating, 6061 Anodized Aluminum
Physical Properties	16 lbs air weight, 4 lbs seawater weight Overall Size: 18.5 x 6.5 inches Housing Size: 12.5 x 6.5 inches

Camera Enclosure

Camera	Raytrix R5 with Raytrix 20 mm lens
Mechanical Properties	1000 m pressure rating, 6061 Anodized Aluminum
Physical Properties	16 lbs air weight, 4 lbs seawater weight Overall Size: 18.5 x 6.5 inches Housing Size: 12.5 x 6.5 inches