PACKETPOWER



Seamlessly integrates monitoring hardware, wireless networking, analysis and reporting into a ready to run system.

MONITORING AND ANALYSIS MADE EASY: The EMX energy portal makes it easy to access detailed power and environmental information. Using any web browser, you can quickly see your top level or detailed power and environmental data, available power infrastructure, examine usage trends across time and more. EMX also simplifies energy cost allocation and reporting with an array of standard and customizable reports.

CLOSELY INTEGRATED HARDWARE AND SOFTWARE: Packet Power provides a true end to end "plug and play" experience with a self configuring wireless network that effortlessy integrates with the EMX monitoring system. From the moment you energize monitors the EMX portal will automatically recognize new devices and make the data available.

THE SMART ALTERNATIVE: EMX can be online and commissioned in fraction of the time and cost of conventional BMS and DCIMs while still delivering the critical information you need to operate and optimize your data center. EMX can run as a cloud application or locally as well as operate simultanuously with conventional building management systems. See why so many enterprise customers choose EMX.

Information that delivers real value and operating efficiencies:

- Optimize available power per circuit without the risk of tripping circuits
- ► Generate energy savings by increasing ambient temperature while safely knowing your peak rack temperature
- ▶ Monitor and optimize air flow using low cost strategically placed pressure sensors
- ▶ Ensure compliance with customer contracts using easy to run reports
- ▶ Maintain uptime by setting policies that ensure safe operating parameters
- Accuracately allocate costing by user and improve billing accuracy
- ▶ Increase PUE resolution to better gauge operating efficiency efforts
- ▶ Automate reporting and time consuming manual measurements

FEATURES

- Real-time power and environmental information from facility wide to device resolution
- Ready to run no costly commissioning and integration expenses
- Supports thousands of monitoring points across multiple facilities
- Multi-company support; separate access to information for different parts of your company or customer sets
- Use as-is or customize reports, dashboards, languages and alerts
- Accessible from any web browser
- Cloud based or locally installed
- Proven globally in enterprise and co-location environments

FUNCTIONS

- Set policies and receive alerts via email or SMS
- Create custom dashboards viewable as web pages
- ▶ 3D thermal maps
- Detailed reporting capabilities
- Dynamic charting and trending functions of real time and historical data

Export data in universal formats

- Track energy usage, costing and C0² emissions
- Create realistic data center diagrams and view information from a facility to device level

SYSTEM OVERVIEW

\$\frac{500,000,0000,000}{500,000,000}\$\$ 41\bar{b}\$\$\$ 1524\$\$\$ 59\bar{b}\$\$\$\$\$ 4865.4\$\$\$\$\$ 1107\$\$\$\$\$\$\$\$\$\$100\$\$\$ 24.9\$	Power cables							Active node summary			
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		43%	12.85	38%	1431.4	1431.4	111.4	1.00	25.9		Past 24 hours
	2100-0000-0000-003A	44%	13.28	38%	1430.5	1430.5	107.7	1.00	22.9		- Investore
DMD-000-000-000- 42% 12.64 88% 4414.9 1414.9 112.9 10.0 27.5 DMC 0000-000-000-000- 43% 12.89 38% 4414.8 108.7 10.0 24.9 100-0000-0000-000- 44% 13.00 88% 148% 148.8 108.7 10.0 24.9 Message Availability Message Channel C Available Message Channel C Available	7500-0000-0000-0004	42%	12.62	38%	1428.9	1428.9	113.2	1.00	28.2		inactive
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200 0000 0000 0000 42% 42 27 27% 4404 4404 450 25 0 Packet Power Email 4,997		43%	12.93	38%	1407.1	1407.1	108.8	1.00	24.7	ACCEPTAGE OF THE PROPERTY OF T	CONTRACTOR CONTRACTOR
Could Did A 42% 42% 42% 43% 44% 45% 45% 45% 45% 45% 45% 45% 45% 45		42%	12.62	37%	1401.4	1401.4	111	1.00	25.0		1000
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Easy to see system wide overviews: View all devices being monitored by type, location, or grouping along with system status from a central dashboard.

condition Cabinet current A1/81 shall be < 20.0% of its rating iniet temperature shall be >= 18.0 Iniet temperature shall be <= 27.0 PDU current shall be <= 80.0% of its rating rating	300 3600 900 300	4 3 2 4	no no
20.0% of its rating inlet temperature shall be >= 18.0 inlet temperature shall be <= 27.0 PDU current shall be <= 80.0% of its	3600 900	3	no
Inlet temperature shall be <= 27.0 PDU current shall be <= 80.0% of its	900	2	no
PDU current shall be <= 80.0% of its			
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PDU current shall be <= 40.0% of its rating	3600	2	n
Humidity shall be <= 60.0	300	2	n
abinet current shall be < 80.0% of its rating	3600	1	no
Violating limit	VS.	Most recent violation	Leve
v	rating Humidity shall be <= 60.0 binet current shall be < 60.0% of its rating Folicy limit. value A	Fating Humistry shall be <= 60.0 300 binet current shall be <= 80.0% of its 3600 raming Foliory limit vs. value limit Value limit	rating Humsity shall be <= 60.0 300 2 Identicurrent shall be < 80.0% of its sating Folicy Margin Most recent value Emolt violation Value Emolt violation

Set Policies to ensure your operating parameters: Define your policy parameters to keep your operating environment in check; any violations are logged and also can trigger email or text alerts.

Layout Second Las Vegan Colo Stat* Cabrier A-0 Cabrier A-0 Cabrier A-3 Cabrier A-5 Cabrier B-0 Cabrier B-0 Cabrier B-1 Cabr	229 182 258 224	162
- Cabinet C-2 - Cabinet C-3 - Cabinet C-5 - Cabinet D-0 - Cabinet D-2 - Cabinet D-3 - Cabinet D-5 - Cabinet D-5	Cabinet A-3 20 Cabinet B-3 28 Cabinet	23.1 Cabinet B-3
Cabinat E-2 Cabinat E-3 Cabinat E-5 Cabinat E-5 Cabinat F-0 Cabinat F-2 Cabinat F-3 Cabinat F-3	228 227 227 227 258 258 273 273	33.6
Layout	(a Web Stare Project (b) Web Stare Project	27.9

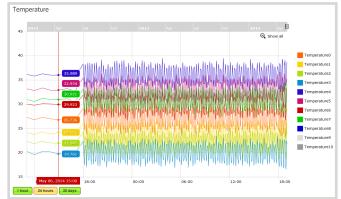
Active Facility Maps: Create accurate facility maps to mimic data center layouts and get detailed information down to the cabinet level including 3D temperature maps, rack and device level power consumption and more.

	Jse and Cost by Device								Energy used	
Monitoring node	OK?	last 24h by phase [kWh]	Energy used last 24h total [kWh]	Energy cost last 24h [\$]	Energy used last 30d [kWh]	Energy used last 30d total [kWh]	Energy cost last 30d [\$]	Energy used last 1yr [kWh]	last fyr A+B+C [kWh]	Energy cos last 1yr [\$]
SERVER AX1	OK	2.7	2.7	0.27	79.4	79.4	7.94	967	967.0	96.70
SERVER A3	OK	14.1	14.1	1.41	400.4	400.4	40.04			
0A00-0000-0000-3A27	OK				1023.9	1023.9	102.39	12553	12553.0	1255.30
0B00-0000-0000-39F4	OK	48.2	48.2	4.82	1498.9	1498.9	149.89	16594.9	16594.9	1659.49
0F00000000002203	OK		34.5	3.45	A: 403.9 B: 297.9 C: 335.2	1037.2	103.72	A: 5457.0 B: 3600.6 C: 4638.9	13696.6	1369.66
	OK	20	20.0	2.00	602.2	602.2	60.22			
140000000000449C	OK	A: 10.9 B: 10.9 C: 8.6	30.4	3.04	A: 308.8 B: 323.9 C: 244.9	877.6	87.76	A: 3466.3 B: 3685.5 C: 3100.2	10252.1	1025.21
1500-0000-0000-2134	OK	6.9	6.9	0.69	224.2	224.2	22.42	288.8	288.8	28.88
1700-0000-0000-2094	OK	24.1	24.1	2.41	719.2	719.2	71.92	11049.9	11049.9	1104.99
1700000000003027	OK				A: 187.1 B: 293.7 C: 108.8	589.5	58.95	A: 2431.0 B: 3868.1 C: 1876.1	8175.0	817.50
1800-0000-0000-3544	OK	11.5	11.5	1.15	377.8	377.8	37.78	4730.1	4730.1	473.01
	OK	50.8	50.8	5.08	1514.2	1514.2	151.42	19042	19042.0	1904.20
1900-0000-0000-304F	OK	44.5	44.5	4.45	1292.3	1292.3	129.23	14307.3	14307.3	1430.73
1900-0000-0000-3A20	OK	35.9	35.9	3.59	1078.7	1078.7	107.87	13237.6	13237.6	1323.76
1000-0000-0000-3565	OK	0.2	0.2	0.02	89.1	89.1	8.91	1370.7	1370.7	137.07
2000-0000-0000-3A38	OK	5.7	5.7	0.57	171.1	171.1	17.11			
2100000000004495	OK	A: 6.4 B: 3.9 C: 0.0	10.4	1.04	A: 178.8 B: 110.6 C: 0.1	289.5	28.95	A: 1869.9 B: 1185.2 C: 1.6	3056.7	305.67

Simplify your reporting: Create energy usage and environmental reports by user, location or device along using the many standard reports or create a custom report. Report information can also be exported into universal formats.



Create custom dashboard web pages: Any information can be assigned to a custom dashboard which will have a unique URL and can be viewed as a web page for "at a glance" status checks.



Charting and Trending: Any parameter can be presented graphically to show historical or real time data and assist in data analysis.

Packet Power

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