Sequential Boot Up

With the SD-PMU, you could determine which port receives power first upon boot up. This is useful for deployments where the operation of the second device is dependent on that of the first. Use the IoT Cloud to remotely determine the boot up sequence.

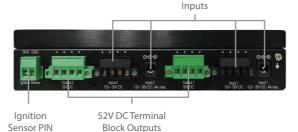
Specifications

	SD Power Management Unit			
Product Code	PMU-DD-52V-400W			
Power Input	2x Terminal Blocks, 2x DC Jack 12-56V DC			
Power Output	4x Terminal Blocks: 52V DC			
Stabilized Power	400W			
Ethernet Port	1x port for IoT Cloud access			
Enclosure	Indoor Metal			
Dimensions	7.4 x 8.1 x 1.6 inches 187 x 205 x 41 mm			
Weight	4.4 pounds 2 kg			
Operating Temperature	-4° − 131°F -20° − 55°C			
Humidity	15% – 95% (non-condensing)			
Certifications	FCC, CE, RoHS, Rolling Stock			
Warranty	1-Year Limited Warranty			

LAN Port for Reset Button IoT Cloud 12-56V DC

Switches

52V DC Terminal **Block Outputs**





Product Ordering Information

Product Code	Product Name	Description
PMU-DD-52V-400W	Software-Defined Power Management Unit	$Software-Defined\ Power\ Management\ Unit,\ 2x\ terminal\ block\ inputs,\ 4x\ terminal\ block\ outputs.\ Cloud\ Functionality.$
Product Code	Description	
ACW-741	Mounting rack mounting ears an	d screws

www.peplink.com

SD-PMU

Software-Defined Power Management Unit





Voltage Fluctuation

Battery power does not provide stable voltage, this could make devices function unreliably or shut down altogether.

Inability to Troubleshoot

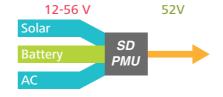
In the event that devices lose power, there is no information on how the battery has been performing up to that point.

following challenges:

Battery Drainage

battery power. Any battery-powered deployments will face the

If batteries are excessively drained, they will be unable to start up the vehicle. Overdraining batteries will also damage them.





Voltage Regulation

The SD-PMU can take power from sources with low or fluctuating voltage and turn them into a reliable streams of 52V power. Each device can support 2 power inputs and 4 power outputs.

Remote Voltage Monitoring

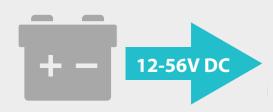
The SD-PMU records battery voltage information and sends it over the IoT Cloud for remote monitoring. In case the SD-PMU cannot reach the IoT Cloud, it will locally store voltage records until it can upload the data.

✓ Voltage Sensing Capabilities

The Low Voltage Disconnect function shuts off access to the battery if the voltage level falls below a defined threshold. The Ignition Sense function shuts off power to connected devices when the vehicle ignition is turned off.



3 Devices in 1

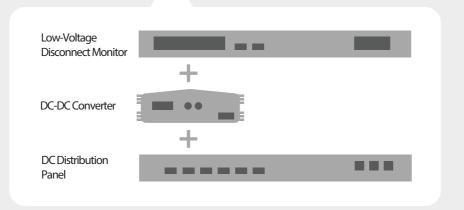




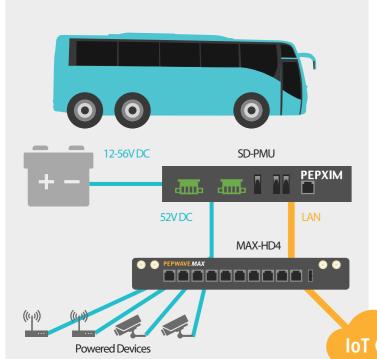
The SD-PMU can reduce setup costs, operational complexity, and maintenance expenses by performing the functions of three devices: a low-voltage disconnect monitor, a DC-DC converter, and a DC distribution panel.

Rather than installing three enclosures and connecting them through cables, installation now simply involves connecting the batteries and an Ethernet connecion to the SD-PMU.

This results in significantly reduced network complexity, smaller footprint, and greater network resilience.

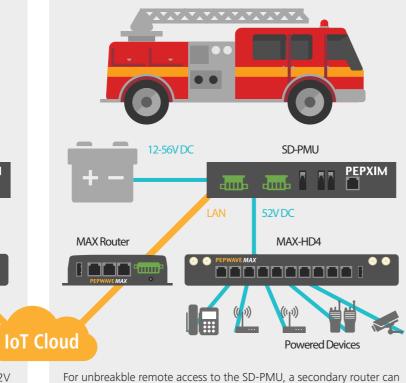


Vehicle Deployment



Connect the SD-PMU to your car battery to deliver reliable 52V power. Connect the LAN port to your router in order to remotely monitor battery output via the IoT Cloud. With 52V power delivery, the SD-PMU can support switches with 802.3at PoE output.

Mission Critical OOBM*



be connected to the LAN port. That way, the SD-PMU is accessible

even when the main router loses connectivity. An additional benefit is

that power to the main router could also be remotely scheduled from

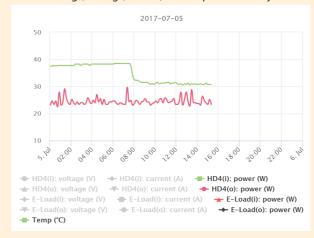
the IoT cloud.

PEPXIM IoT Cloud

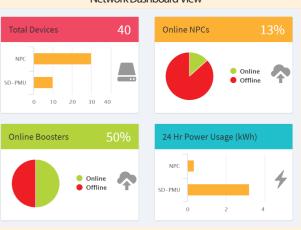
Remote Troubleshooting

The Pepxim IoT cloud provides a number of tools for remote troubleshooting. On the network level, the dashboard displays the connectivity status and power usage of all your devices on a single screen. On the individual device level, the Pepxim IoT cloud stores comprehensive information on the voltage, wattage, and current of each port, as well as device temperature. This view contains historical data from months ago, making troubleshooting significantly easier. The real-time monitor updates every 5 seconds, enabling instant feedback on any network changes.

Voltage, Wattage, Current, and Temperature History



Network Dashboard View



Realtime Monitor - Updates every 5 Seconds



Batch Management

The Pepxim IoT Cloud enables you to perform configuration that would otherwise require a trip onsite. From any web browser, you can set voltage, current, and temperature thresholds. If a threshold is reached, the port or device will shutdown. In addition, the IoT cloud also enables you to configure and schedule firmware updates for your Pepxim devices. You can make these configurations upon multiple devices simultaneously, saving significant time.

Batch Firmware Updates

De	evice Group:	*			Upgrade	
	Product	Online	Offline	Firmware	Options	
	SD-PMU	4 🖨	4 🖨	fw-pmuhw1-1.0.2.bin ▼	Include ▼	
	NETWORK POWER CONTROLLER	5⊖	24 🖨	fw-npchw2-1.0.8.bin ▼	Include ▼	
*0	nly online devices will be u	odated				

Shutdown on Voltage, Current, or Temperature Threshold

SD-PMU Port 1						
	Shutdown (V)	Recovery (V)	Max Voltage (V)	Min Voltage (V)	Max Current (A)	
In						
Out						
SD-PMU Port 2						
	Shutdown (V)	Recovery (V)	Max Voltage (V)	Min Voltage (V)	Max Current (A)	
In						
Out						
SD-PMU						
Ter A	mperature bove(C)					
*Only modified fields will be updated						