

Power Supplies, UPS

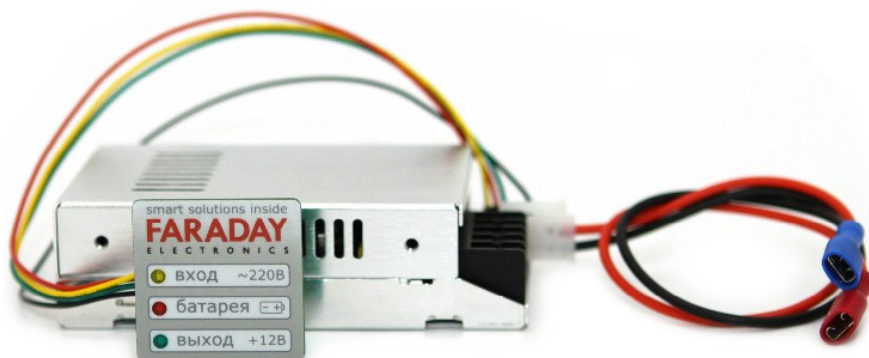
Batteries

Remote Controlled Electromechanical Locks

Charge Controllers

Solar Panels

Safety Deposit Box



**FARADAY Electronics** is electronic manufacturing and distributing company named after the British physicist and chemist Michael Faraday.

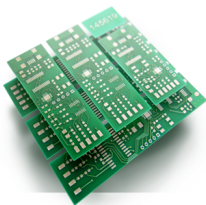
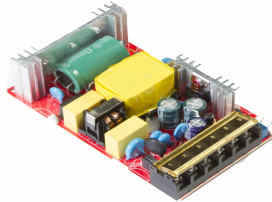
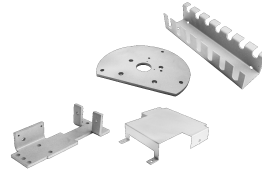
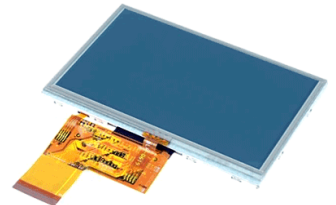
**FARADAY Electronics** is the modern innovative company. We provide a full cycle of development, production and sales of electronics.

**FARADAY Electronics** team is committed to developing innovative, reliable and value-oriented electronic products and providing most effective full cycle of development, production and distribution. Our goal is providing to our customers most efficient solution for their needs as quickly, accurately and efficiently as possible.

Today our products are successfully distributes in Germany, France, USA, Czech Republic, Australia, as well as in Poland, Russia, Ukraine and UAE where **FARADAY Electronics** has representatives. Our companies' manufacturing facilities are located in China and Ukraine.

We are proud to serve a global customer through three business segments:

- Power supplies - **FARADAY Electronics** main area of expertise is design and manufacturing of low power (up to 500 W) Power Supplies and distributing them worldwide for security and fire alarm systems, video surveillance and access control, telecommunication and other type of equipment.
- Contract manufacturing. Our company is leading contract manufacturer specializing on:  
assembly of components on printed circuit boards;  
production of printed- circuit boards;  
manufacturing of membrane, silicon, metal and combined type keyboards;  
assembly of cables and harnesses;
- Designing and manufacturing the cabinets, parts of rubber, plastic or silicone, powder metallurgy, metal stamping - both the full cycle, and manufacturing the molds and dies for your production.
- Design, development and manufacturing of electronic and electro-mechanical products according to a customer needs and specification.
- Solar panels and power station. Our company is constantly expanding its line of products. Today we offer most demanding and innovating renewable generation systems to our customers.

**printed circuits****contract assembly****keyboards****stamps and molds****other**

Our mission is to provide our customers a superior products and outstanding services at all stages: from design and development to supplying high quality final product to a customer's door at any location around the world.

Our values are:

- Maintain professionalism in fulfillment and strive for continual improvement and innovation,
- Act with integrity, honesty and respect;
- Value trust and personal responsibility;
- Strive to create a safe work environment;
- Value each employee's contribution to our business objectives;
- Promote a customer-oriented culture for employees.
- Respect diverse perspectives and traditions.
- To contribute to environmental protection

Let us know how **FARADAY Electronics** can serve you.



Provides emergency power when AC input power source fails

2 x LED status indicator

Additional external indication for the box

Optional thermal stabilization

Miniature aluminum enclosure, plastic box

Battery hot swapping

4 X status outputs

Without battery operates as DC Power supply

Disconnects battery from load if battery voltage below 10.6V

**Specification:**

	UPS 30W	UPS 45W	UPS 75W
Aluminum enclosure dimensions (mm)	101x59x29	110x68x31	134x74x37
Circuit size for OPF mounting option (mm)	97.5x55.5x23	107x65x32	127x69x32
Plastic box for 7-9 A/h batteries' size	210x180x100 (DIN bar or wall mounting)		
Input voltage	110-230VAC		
Open-circuit power	≤1W		
Max input voltage	86-264VAC, 110-360VDC		
Utility frequency	47-63 (400) Hz		
Output voltage (mains mode)	14.1V		
Output voltage (battery mode)	10.2-13.8 V		
Battery charge voltage	13.8 V ( <b>optional thermal stabilization</b> )		
Battery cut-off voltage	10.4-10.6 V		
Load output current	2.0A	3.0A	5.0A
Max output current (mains mode)	3.0A	4.5A	7.0A
Max output current (battery mode)	4.0A	5.5A	7.5A
Battery charging current rating	0.5A	0.7A	0.9A
Battery charge sustaining current	20-100 mA (depends on battery capacity)		
Recommended battery capacity	7Ah	9-12Ah	9-18Ah
Battery mode current consumption	20mA	20mA	40mA
Voltage loss between battery and output	0.15V (max current)		
Primary source efficiency	85%		
Output, charge and network condition indication	3 LED indicators on unit's circuit		
Output voltage noise and ripples	≤40mV	≤50mV	≤60mV
Input/output breakdown voltage	3000VAC 50Hz 1 minute ≤5mA		
Input/ground breakdown voltage	1500VAC 50Hz 1 minute ≤5mA		
Operating ambient temperature	-20°C - +55°C		
Storage temperature	-30°C - +80°C		
Status outputs (30mA max transistor's open collector)	AC input presence		
	DC output presence		
	Battery voltage below 11V		
	Short circuit, open circuit, overload circuit battery		
Indication logic	Yellow LED: on solid - voltage 220V, flashing - protection is on		
	Red LED: on solid - battery voltage is lower 12.8V		
	Green LED: on solid - voltage presence on PS output		

Vendor package	Indication circuit	Battery cable	DIN bar
Aluminum housing	+	+	if required
Plastic (metal) box	+	+	+ (-)
Open frame	+	+	not needed



Sealed fire-resistant enclosure

Gelled-electrolyte technology

Overdischarge protection: valve

Is capable of handling full discharges

For use in security and fire safety systems

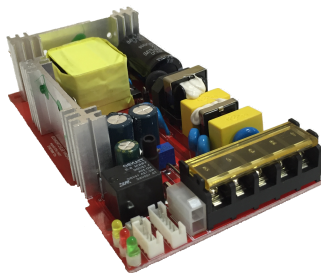
Recommended for UPS 30W, 45W, 75W

**Specification:**

Model		FAR7-12	FAR9-12	FAR18-12
Voltage		12V		
Rated capacity		7.0Ah	9.0Ah	18.0Ah
Dimentions	length	151 mm	151 mm	181 mm
	width	65 mm	65 mm	77 mm
	height	95 mm	95 mm	167 mm
	with terminal	101 mm	101 mm	167 mm
Weight		2.0 kg	2.48 kg	4.90 kg
Terminal		T1/T2		T3
Capacity (25°C)	20 hours	7.0Ah	9.0Ah	18.0Ah
	10 hours	6.51Ah	8.37Ah	16.7Ah
	5 hours	5.95Ah	7.65Ah	15.3Ah
	1 hour	4.27Ah	5.49Ah	11.0Ah
	15 minutes	3.24Ah	4.16Ah	8.3Ah
Internal resistance (25°C)		22mΩ	18mΩ	
Battery capacity	40°C	102%		
	25°C	100%		
	0°C	85%		
	-15°C	65%		
Capacity after self-discharge (25°C)	3M	90%		
	6M	80%		
	12M	60%		
Max current		105A (5 s)	135A (5 s)	270A (5 s)
Warranty (25°C)		5 years		
Constant voltage charge (25°C)	cycle	14.5-14.9V max 2.1A		
	float	13.6-13.8V		







12-24VDC Adjustable output with 10-turns variable resistor

Universal output 12-24VDC

Wide range of input voltage: 84-264VAC, 90-380VDC

Overload protection with automatic recovery

2 x LED Status Indicator

Miniature size

**Specification:**

Output	Rated power	18W	36W	50W <sup>1</sup>	75W <sup>1</sup>
	DC voltage	12-24V			
	DC adjustable voltage range	11.5-24.5V			
	Rated current	12V @ 1.5A; 24V @ 0.75A	12V @ 3.0A; 24V @ 1.5A	12V @ 4.25A; 24V @ 2.1A	12V @ 6.25A; 24V @ 3.15A
	Output voltage noise and ripples	≤0.5%			
	PWM frequency	65-130KHz (22KHz without load)			
	Temperature regulation	≤1%			
	Output voltage setup time	1200ms			
	Max current for OC output	40mA			
Input	Voltage range	100-240VAC (84VAC Min, 264VAC Max) 90-380VDC			
	Frequency range	40 ~ 400Hz			
	Efficiency	>85% @ 12V, >88% @ 24V			
	Open-circuit power	≤1.0W			
	Inrush current	20A max		35A max	
Indication	Green LED	on solid - normal, flashing - protection activated			
	Red LED	ON/OFF Output voltage: >18VDC/<18VDC			
Protection	Max output power	21W	43W	60W	90W
	Protection type	full auto			
Environment	Operating ambient temperature	- 25 °C to + 70 °C			
	Storage temperature	-40 °C to +85 °C (humidity 10%~90%)			
	Humidity (non-condensing)	20%~90%			
	Vibration	10-500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes			
Safety & EMC	Confirmed safety standards	IEC61000-3-2:2004, EN61000-3-3:2004, EN55013:2004, EN55020:2003, IEC60065:2009			
	Input/output breakdown voltage	3000V/60s/5mA			
	Input/ground breakdown voltage	1500V/60s/5mA			
	Output/ground breakdown voltage	500V/60s/5mA			
	Insulation resistance (input/output, input/ground, output/ground)	100MΩ, ±500V			
Others	MTBF	150 000 hours			
	Enclosure dimensions	84x54x25	101x59x29	110x68x31	134x74x37
	Warranty	3 years			
	Packaging	white box, 100 pieces per carton		white box, 50 pieces per carton	
	Weight	71 g	110 g	150 g	185 g

<sup>1</sup>CON1 port (pin 3) on 50W and 75W Power Supplies is used for external control. If V- applied from pin #1 the Power Supply turns OFF. If V+ applied from pin#2 the Power Supply is ON. Numbering of pins starts from board edge: #1: V- #2 V+ #3 ON/OFF



Miniature aluminum enclosure

12-24VDC Adjustable output with 10-turns variable resistor

Universal output 12-24VDC

Wide range of input voltage: 84-264VAC, 90-380VDC

2 x LED Status Indicator

Overload protection with automatic recovery

**Specification:**

Output	Rated power	18W	36W	50W <sup>1</sup>	75W <sup>1</sup>
	DC voltage	12-24V			
	DC adjustable voltage range	11.5-24.5V			
	Rated current	12V @ 1.5A; 24V @ 0.75A	12V @ 3.0A; 24V @ 1.5A	12V @ 4.25A; 24V @ 2.1A	12V @ 6.25A; 24V @ 3.15A
	Output voltage noise and ripples	≤0.5%			
	PWM frequency	65-130kHz (22kHz without load)			
	Temperature regulation	≤1%			
	Output voltage setup time	1200ms			
	Max current for OC output	40mA			
Intput	Voltage range	100-240VAC (84VAC Min, 264VAC Max) 90-380VDC			
	Frequency range	40 ~ 400Hz			
	Efficiency	>85% @ 12V, >88% @ 24V			
	Open-circuit power	≤1.0W			
	Inrush current	20A max		35A max	
Indication	Green LED	on solid - normal, flashing - protection on			
	Red LED	ON/OFF Output voltage: >18VDC/<18VDC			
Protection	Max oUtpu power	21W	43W	60W	90W
	Protection type	full auto			
Environment	Operating ambient temperature	- 25 °C to + 70 °C			
	Storage temperature	-40 °C to +85 °C			
	Humidity (non-condensing)	20%~90%			
	Vibration	10-500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes			
Safety & EMC	Confirmed safety standards	IEC61000-3-2:2004, EN61000-3-3:2004, EN55013:2004, EN55020:2003, IEC60065:2009			
	Input/output breakdown voltage	3000V/60s/5mA			
	Input/ground breakdown voltage	1500V/60s/5mA			
	Output/ground breakdown voltage	500V/60s/5mA			
	Insulation resistance (input/output, input/ground, output/ground)	100MΩ ±500V			
Others	MTBF	150 000 hours			
	Enclosure size	84x54x25	101x59x29	110x68x31	134x74x37
	DIN-rail holder	DIN-holder supplied separately			
	Warranty	3 years			
	Packaging	white box, 100 pieces per carton		white box, 50 pieces per carton	
	Weight	100 g	150 g	200 g	270 g

<sup>1</sup>CON1 port (pin 3) on 50W and 75W Power Supplies is used for external control. If V- applied from pin #1 the Power Supply turns OFF. If V+ applied from pin#2 the Power Supply is ON. Numbering of pins starts from board edge: #1: V- #2 V+ #3 ON/OFF



12-24VDC Adjustable output with 10-turns variable resistor

Universal output 12-30V

Universal input 84-264VAC;  $\pm 90$ -380VDCOptional thermal stabilization<sup>2</sup>

2 x LED Status Indicator

**Specification:**

Output	Rated power	20W		40W		60W		80W	
	DC voltage	12-30V							
	DC adjustable voltage range	11.5-24.5V							
	Rated current	12V @ 1.7A; 30V @ 0.7A		12V @ 3.4A; 30V @ 1.4A		12V @ 5.0A; 30V @ 2.0A		12V @ 6.7A; 30V @ 2.7A	
	Output voltage noise and ripples	≤0.5%							
	PWM frequency	65-130kHz (22kHz without load)							
	Temperature regulation	≤1%							
	Output voltage setup time	1200ms							
	Max current for OC output <sup>1</sup>	40mA							
Input	Voltage range	100-240VAC (84VAC Min, 264VAC Max) 90-380VDC							
	Frequency range	40 ~ 400Hz							
	Efficiency	>86%@12V, >89%@24V							
	Open-circuit power	≤1.0W							
	Inrush current	20A max				35A max			
Indication	Green LED	on solid - normal, flashing - protection on							
	Red LED	ON/OFF Output voltage: >18VDC/<18VDC							
Protection	Max output power	24W		48W		70W		96W	
	Protection type	full auto							
Environment	Operating ambient temperature	- 25 °C to + 70 °C							
	Storage temperature	-40 °C to +85 °C (humidity 10%~90%)							
	Humidity (non-condensing)	20%~90%							
	Vibration	10-500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes							
Safety & EMC	Confirmed safety standards	IEC61000-3-2:2004, EN61000-3-3:2004, EN55013:2004 EN55020:2003, IEC60065:2009							
	Input/output breakdown voltage	3000V/60s/5mA							
	Input/ground breakdown voltage	1500V/60s/5mA							
	Output/ground breakdown voltage	500V/60s/5mA							
	Insulation resistance (input/output, input/ground, output/ground)	100MΩ ±500V							
Others	MTBF	150 000 hours							
	Enclosure size	84x54x 25		101x59x29		110x68x31		134x74x37	
	DIN-rail holder	DIN-holder supplied separately							
	Warranty	3 years							
	Packaging	white box, 100 pieces per carton				white box, 50 pieces per carton			
	Weight	100 g		150 g		200 g		270 g	

<sup>1</sup>Additional CON1 port on 40/60 and 80W power supplies is designed for ps remote control and receiving information about 220V network presence. Pin assignment starting from circuit's edge: 1) V- 2) bare collector "20V network" 3) TL431 stabilizer control input 4) V+. Pin #2 is also duplicated to the main terminal as pin #6.

<sup>2</sup>TR1 port designed for output voltage control in relation to ambient temperature provided by connecting thermoresistor. Thermoresistor and cable are supplied separately.



Standard aluminium enclosure  
 Overload protection with automatic recovery  
 Optional thermal stabilization<sup>1</sup>  
 LED status indicator  
 Sequential or parallel connection of channels  
 Output voltage (max.) 60V@1.4A  
 Output current (max.) 6.7A@12V

**Two independent adjustable outputs (channels) 12-30VDC, (2 x 40W)**

#### Specification:

Output	Rated power	<b>80W (2x40W)</b>
	DC voltage	12V - 30V (Adjustable, each output independently) 24V - 60V DC (Sequential connection)
	DC adjustable voltage range	11.4V-30.2V
	Rated current	3.4A @ 12V per channel 1.3 A @ 30V per channel 6.7 A @ 12V (parallel connection)
	Output voltage noise and ripples	≤0.5%
	PWM frequency	66-120kHz (66kHz without load)
	Temperature regulation	≤1%
	Output voltage setup time	1500ms
Input	Voltage range	90-264VAC (switch)
	Frequency range	40 ~ 400Hz
	Efficiency	>86%@12V, >88%@24V
	Open-circuit power	≤2.0W
	Inrush current	30A max
Indication	Green LED	on solid - normal, flashing - protection on
	Red LED	ON/OFF Output voltage: >18VDC/<18VDC
Protection	Max output power	50W on channel, 100W overall power
	Protection type	full auto
Environment	Operating ambient temperature	- 25 °C to + 70 °C
	Storage temperature	-40 °C to +85 °C (humidity 10%~90%)
	Humidity (non-condensing)	20%~90%
	Vibration	10-500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes
Safety & EMC	Confirmed safety standards	IEC61000-3-2:2004, EN61000-3-3:2004, EN55013:2004, EN55020:2003, IEC60065:2009
	Input/output breakdown voltage	3000V/60s/5mA
	Input/ground breakdown voltage	1500V/60s/5mA
	Output/ground breakdown voltage	500V/60s/5mA
	Insulation resistance (input/output, input/ground, output/ground)	100MΩ, ±500V
	MTBF	150 000 hours
Others	Enclosure size	134x74x37
	DIN-rail holder	DIN-holder supplied separately
	Warranty	<b>3 years</b>
	Packaging	white box, 50 pieces per carton
	Weight	280 g

<sup>1</sup>TR1 port designed for output voltage control in relation to ambient temperature provided by connecting thermoresistor. Thermoresistor and cable are supplied separately.



LED status indicator  
 Overload protection with automatic recovery  
 Wide range of input voltage: 100-240VAC, 150-380VDC  
 Universal output 50-60V  
 12-24VDC Adjustable output with 10-turns variable resistor  
 Miniature aluminum enclosure

#### Specification:

Output	Rated power	<b>45W</b>	<b>65W</b>
	DC voltage	<b>50-60V</b>	
	DC adjustable voltage range	48.5-61.5V	
	Rated current	50V@1.0A; 60V@0.75A	50V@1.3A; 60V@1.1A
	Output voltage noise and ripples	≤0.5%	
	PWM frequency	120kHz (60kHz without load)	
	Temperature regulation	≤1%	
	Output voltage setup time	1500ms	
	Output CON2 <sup>1</sup>	1. V-; 2. V+; 3. On/Off	
	Max current for OC output	40mA	
Input	Voltage range	100-240VAC (94VAC Min, 264VAC Max) 150-380VDC	
	Frequency range	47 ~ 63Hz	
	Efficiency	>82%@12V, >84%@24V	
	Open-circuit power	≤4.0W	
	Inrush current	40A max	
Indication	Green LED	on solid - normal, flashing - protection on	
Protection	Max output power	<b>60W</b>	<b>100W</b>
	Protection type	full auto	
Environment	Operating ambient temperature	- 25 °C to + 65 °C	
	Storage temperature	-40 °C to +85 °C (humidity 10%~90%)	
	Humidity (non-condensing)	20%~90%	
	Vibration	10-500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes	
Safety & EMC	Confirmed safety standards	IEC61000-3-2:2004, EN61000-3-3:2004, EN55013:2004, EN55020:2003, IEC60065:2009	
	Input/output breakdown voltage	3000V/60s/5mA	
	Input/ground breakdown voltage	1500V/60s/5mA	
	Output/ground breakdown voltage	500V/60s/5mA	
	Insulation resistance (input/output, input/ground, output/ground)	100MΩ, ±500V	
Others	MTBF	150 000 hours	
	Enclosure size	110x68x31	110x68x31
	DIN-rail holder	DIN-holder supplied separately <sup>2</sup>	
	Warranty	<b>2 years</b>	
	Packaging	white box, 50 pieces per carton	
	Weight	200 g	270 g

<sup>1</sup>CON1 port on 50 an 75W power supplies is designed for remote power off if load needs warm boot. Power supply switches off the load while it is V- connected to On/Off point

<sup>2</sup>DIN-rail mounting



<sup>2</sup>DIN holder appearance





Standard aluminium enclosure

Overload protection with automatic recovery

LED status indicator

PFC corrector\*

Built-in cooler\*

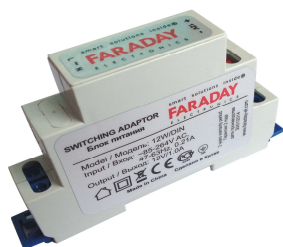
3 terminals for each pole\*

Wide range input voltage: 90-132 VAC or 176-264VAC  
(controlled by switch)**Specification:**

		120W	240W	350W
Output	Rated power			
	DC voltage	12V (15, 18, 24, 36, 48V per customer request)		
	DC adjustable voltage range for 12V model	10.08-13.2V		
	Rated current, Uoutput=12V	10A	20A	29A
	Output voltage noise and ripples	≤0.5%		
	PWM frequency	120kHz (66kHz without load)		
	Temperature regulation	≤1.0%		
	Output voltage setup time	1500ms		
Input	Voltage range	164-264VAC max	90-132VAC, 176-264VAC (switch)	
	Frequency range	40 ~ 400Hz		
	Efficiency	>84% @ 12V		
	Open-circuit power	≤1.7W	≤2.0W	
	PFC corrector	+		
	Cooling Fan	-	auto	
	Inrush current	20A max	35A max	
Indication	LED	on solid - normal, flashing - protection on		
Protection	Max output power	160W	320W	450W
	Protection type	full auto		
Environment	Operating ambient temperature	- 20 °C to + 65 °C		
	Storage temperature	-25 °C to +85 °C (humidity 10%~90%)		
	Humidity (non-condensing)	20%~90%		
	Vibration	10-500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes		
Safety & EMC	Confirmed safety standards	IEC61000-3-2:2004, EN61000-3-3:2004, EN55013:2004, EN55020:2003, IEC60065:2009		
	Input/output breakdown voltage	3000V/60s/5mA		
	Input/ground breakdown voltage	1500V/60s/5mA		
	Output/ground breakdown voltage	500V/60s/5mA		
	Insulation resistance (input/output, input/ground, output/ground)	100MΩ ±500V		
Others	MTBF	-	150 000 hours	
	Enclosure size	160x98x39	215x115x50	
	DIN-rail holder	DIN-holder supplied separately		
	Warranty	3 years		
	Packaging	white box, 20/30 pieces per carton		
	Weight	460 g	900 g	

\* For 240W &amp; 350W models only





LED status indicator  
 Full autoprotection from overload  
 Miniature enclosure for DIN-rail  
 Wide range input voltage: 84-264VAC, 90-380VDC  
 Quick-detachable DIN-holder

### Specification:

Output	Rated power	<b>12W</b>
	DC voltage	12V (3, 5, 9, 15, 18, 24, 36, 48V per customer request)
	DC adjustable voltage range	48V - 0.25A; 3V - 2.5A
	Rated current for 12V model	1.0A
	Output voltage noise and ripples	≤0.5%
	PWM frequency	65kHz
	Temperature regulation	≤1%
	Output voltage setup time	1200ms
Input	Voltage range	100-240VAC (84VAC Min, 264VAC Max) 90-380VDC
	Frequency range	37 ~ 400Hz
	Efficiency	> 85% @ 12V
	Open-circuit power	≤1.0W
	Inrush current	20A max
Indication	Red LED	on solid - normal, flashing - protection on
Protection	Max output power	15W
	Protection type	full auto
Environment	Operating ambient temperature	- 25 °C to + 70 °C
	Storage temperature	-40 °C to +85 °C (humidity 10%~90%)
	Humidity (non-condensing)	20%~90%
	Vibration	10-500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes
Safety & EMC	Confirmed safety standards	IEC61000-3-2:2004, EN61000-3-3:2004, EN55013:2004, EN55020:2003, IEC60065:2009
	Input/output breakdown voltage	3000V/60s/5mA
	Input/ground breakdown voltage	1500V/60s/5mA
	Output/ground breakdown voltage	500V/60s/5mA
	Insulation resistance (input/output, input/ground, output/ground)	100MΩ ±500V
	MTBF	150 000 hours
Others	Enclosure size	90x63x18
	DIN-rail holder	+
	Warranty	2 years
	Packaging	white box, 100 pieces per carton
	Weight	55 g



Wide range input voltage: 100-240VAC, 150-380VDC

8 hours burn-in test

Miniature plastic housing

Overload protection with automatic recovery

Nonflammable housing material

2 years warranty

Designed for CCTV camera supply, storage systems, POS

**Specification:**

Output	Rated power	<b>12W</b>	<b>18W</b>	<b>24W</b>	<b>36W</b>	<b>60W</b>
	Output voltage	<b>12V (3, 5, 9, 15, 24, 36, 48V per customer request)</b>				
	Rated current	<b>1A</b>	<b>1.5A</b>	<b>2A</b>	<b>3A</b>	<b>5A</b>
	Output voltage noise and ripples	≤1.0%				
	Switching frequency	65kHz (22kHz without load)				
	Temperature regulation	≤1%				
	Output voltage setup time	1500ms				
Input	Voltage range	100-240VAC (94-264VAC MAX);150-380VDC				
	Utility frequency	47 ~ 400Hz				
	Efficiency	≥82% @ 12V				
	Open-circuit power	≤0.5W				
	Starting current	20A max				
Indication	LED	on solid - normal, flashing - protection on				
Terminal	Input plug settings (is set up by customer)	according to the order				
Output cable & connector	Output connector and cable settings (is set up by customer)	according to the order				
Protection	MAX output power	15-18W	22-27W	30-36W	45-54W	70-90W
	Protection type	full auto				
Environment	Operating ambient temperature	0 °C to + 60 °C				
	Storage temperature	-10 °C to +85 °C (humidity 10%~90%)				
	Humidity	20%~90%				
	Vibration	10-500Hz, 5G 10min./1cycle, period for 60min. each along X, Y, Z axes				
Safety & EMC	Confirmed safety standards	IEC61000-3-2:2004, EN61000-3-3:2004, EN55013:2004, EN55020:2003, IEC60065:2009, EN60950-1				
	Input/output breakdown voltage	3000V/60s/5mA				
	Insulation resistance	100MΩ 500VDC				
Others	MTBF	150 000 hours				
	Warranty	<b>2 years</b>				
	Packaging	white box, 100 pieces per carton				
	Enclosure size	72x42x26	72x43x28	89x37x29	97x44x31	120x50x34
	Weight (without cables)	125 g.	130 g.	138 g.	197 g.	256 g.

The manufacturer reserves the right to make changes to the design and ps circuits as long as it is not impairing its performance.



Wide input voltage range: 100-240VAC, 150-380VDC

8 hours burn-in test

Miniature plastic enclosure

Overload protection with automatic recovery

LED status indicator

Shielded output cable

Nonflammable housing material

2 years warranty

**Specification:**

Output	Rated power	<b>3W</b>	<b>5W</b>	<b>8W</b>	<b>10W</b>	<b>12W</b>	<b>15W</b>	<b>18W</b>
	Output voltage	<b>12V (3, 5, 9, 15, 18, 24, 36, 48V per customer request)</b>						
	Rated current (Uoutput=12V)	<b>0.25A</b>	<b>0.40A</b>	<b>0.65A</b>	<b>0.85A</b>	<b>1.0A</b>	<b>1.25A</b>	<b>1.5A</b>
	Output voltage noise and ripples	≤1.0%						
	PWM frequency	65kHz (22kHz without load)						
	Temperature regulation	≤1%						
	Output voltage setup time	1500ms						
Input	Voltage range	100-240VAC (94VAC Min, 264VAC Max), 150-380VDC						
	Frequency range	47 ~ 63Hz						
	Efficiency	≥82% @ 12V						
	Open-circuit power	≤0.5W						
	Inrush current	20A max						
Indication	LED	on solid - normal, flashing - protection on						
Input plug	Input plug settings (set up by customer)	according to the order						
Output cable & connector	Output connector and cable settings (set up by customer)	according to the order						
Protection	Max output power	3.6W	6W	9.6W	12W	14.4W	18W	21.6W
	Protection type	full auto						
Environment	Operating ambient temperature	0 °C to + 60 °C						
	Storage temperature	-10 °C to +85 °C (humidity 10%~90%)						
	Humidity (non-condensing)	20%~90%						
	Vibration	10-500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes						
Safety & EMC	Confirmed safety standards	IEC61000-3-2:2004, EN61000-3-3:2004, EN55013:2004, EN55020:2003, IEC60065:2009						
	Input/output breakdown voltage	3000V/60s/5mA						
	Insulation resistance (input/output)	100MΩ ±500V						
Others	MTBF	150 000 hours						
	Warranty	<b>2 years</b>						
	Packaging	white box, 100 pieces per carton						

**FARADAY Electronics is taking the applications for the designing and production of power supply units according to your design assignment.**



2 x LED Status Indicator  
 Overload protection with automatic recovery  
 Two jacks PoE & Data on housing  
 Wide input voltage range: 84-264VAC, 90-380VDC  
 Miniature size  
 Net work cable provided

**Specification:**

**24W/POE**

**24W/POE+**

Output	Rated power	<b>24W</b>	
	Voltage range	45.6-50.4V	
	Rated current	0.5A	
	Output voltage noise and ripples	≤0.3%	
	PWM frequency	120kHz (66kHz without load)	
	Temperature regulation	≤1%	
	Output voltage setup time	3000ms max on 100VAC	
	<b>POE+ standard support</b>	<b>no</b>	<b>yes</b>
Input	Voltage range	100-240VAC (90VAC Min, 264VAC Max) 90-380VDC	
	Frequency range	40 ~ 400Hz	
	Efficiency	≥82%	
	Open-circuit power	≤1.0W	
	Inrush current	60A max	
Indication	Link	Ethernet network signal availability	
	Power	signal availability on output	
Protection	Max output power	32W	
	Protection type	full auto	
Environment	Operating ambient temperature	- 10 °C to + 50 °C	
	Storage temperature	-40 °C to +85 °C (humidity 10%~90%)	
	Humidity (non-condensing)	20%~90%	
	Vibration	10-500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes	
Safety & EMC	Confirmed safety standards	IEC61000-3-2:2004, EN61000-3-3:2004, EN55013:2004, EN55020:2003, IEC60065:2009	
	Input/output breakdown voltage	3000V/60s/5mA	
	Input/ground breakdown voltage	1500V/60s/5mA	
	Output/ground breakdown voltage	500V/60s/5mA	
	Insulation resistance (input/output, input/ground, output/ground)	100MΩ ±500V	
Others	MTBF	150 000 hours	
	Enclosure size	113.2x55x30	
	Warranty	<b>2 years</b>	
	Packaging	white box, 50 pieces per carton	
	Weight	150 g	



Provides highest level for protection of critical data and equipment

Front LCD Display with full status Information

Zero cross transfer tracing

Pure sine wave output

Reliable, expandable lead acid battery backup

Automatic voltage regulation

Complete Surge Suppression

Line-interactive (tolerates continuous undervoltage  
and overvoltage without consuming battery power)

#### Specification:

Model		UPS500	UPS800	UPS1000	UPS1500	UPS2000	UPS3000	UPS5000	
Rated Capacity		VA	500	800	1000	1500	2000	3000	5000
		W	300	480	600	900	1200	1800	3000
Size	Length		350	390			430		
	Width		180	240			350		
	Height		140	160			210		
Weight, kg			5.1	26.3	12.5	7.5	36.6	21.4	10.3
Battery voltage			12VDC	48VDC	24VDC	12VDC	48VDC	24VDC	12VDC
Battery charging current			10-11A	13-15A					
Battery type			Lead Acid Battery						

Technology	Line-interactive Technology + Zero Cross Transfer Technology
Input Voltage Range	145-275V
Input Frequency	45-65Hz
Rated Output Voltage	220V
Output Voltage Precision	-13%, +10%% at mains mode; ±5% at battery mode
Output Frequency	synchronized with input frequency at mains mode; 50/60Hz± 0.1Hz at battery mode
Output Wave Form	pure sine wave (both mains mode and battery mode)
Transfer Time	<8ms
Protection	overload, overheat, short circuit, battery low voltage, battery reverse connection
Colorful Display	input Voltage, Output Voltage, Output Frequency, Charging Battery/Battery Capacity, Load Capacity, Mains Mode, Battery mode, Overload, Error
Audible Alarm	Battery Mode, Overload, Overheat, Short Circuit, Battery Low Voltage, Other Errors
Operating ambient temperature	-5°C - 40°C
Storage temperature	-15°C - 45°C
Humidity	10%~90%, non-condensing
Noise	<56dB at 1m distance with full load
Certification	CE (EMC+LVD)
Protection Class	IP20

The advantage of line-interactive UPS system is the Automatic Voltage Regulator (AVR) that corrects abnormal voltage without switching to battery. Alternately, other systems regulate voltage by switching to battery, which leads to consumption of your backup power and can cause battery to wear out prematurely.



Sealed fire-resistant enclosure

Up to 300 full discharge cycles

Overdischarge protection: valve

Gelled-electrolyte technology

Recommended for stand-alone power generation systems

**Specification:**

Rated capacity 25℃		100Ah	150Ah	200Ah	250Ah
DC voltage		12V			
Size	Length	330mm	485mm	522mm	520mm
	Width	171mm	172mm	238mm	268mm
	Height	220mm	240mm	218mm	220mm
	Total height	227mm	240mm	236mm	238mm
Weight		28.5kg	41.8kg	56kg	71kg
Terminal		T6/T12	T9/T13	T9/T13	
Capacity	20h	106.0 Ah	159.0 Ah	212.0 Ah	365.0 Ah
		5.30A	7.95A	10.6A	13.25A
	10h	100.0 Ah	150.0 Ah	200.0 Ah	250.0 Ah
		10.0A	15.0A	20.0A	25.00A
	5h	85.0 Ah	127.5 Ah	170.0 Ah	212.5 Ah
		17.0A	25.5A	34.0A	42.50A
	1h	55.0 Ah	65.6 Ah	110.0 Ah	137.5 Ah
		55.0A	82.5A	110.0A	137.5A
	15minutes	43.8 Ah	65.6 Ah	87.5 Ah	109.4 Ah
		175.0A	262.5A	350A	437.5A
Internal resistance		5.0 mΩ	3.8 mΩ	3.5 mΩ	2.6 mΩ
Temperature dependence of capacity (10HR)	40℃	1.02			
	25℃	100%			
	0℃	0.85			
	-15℃	0.65			
Capacity after self-discharge, % (20℃)	3 months	0.9			
	6 months	0.8			
	12 months	0.6			
Max discharge current (25℃)		800A	1200A	1600A	2000A
Floating design life (25℃)		10 years			
Constant voltage charge	cycle	14.4~14.7V (-24mV/℃)			
	float	13.6~13.8V (-18mV/℃)			

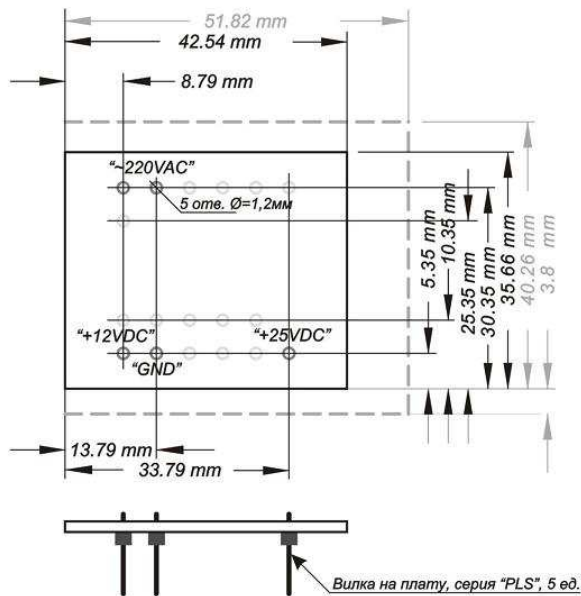


The professional team of engineers will fulfil your order according to the technical specifications. We will advise you on the parameters selection, the best possible materials and technologies used, will make sure that the final product has all the claimed benefits. Every single company, that applied to us for the power supply unit, got the desired product!

The absolute minimum data required to estimate the cost and time of the pilot sample development and batch supply:

- unit assignment: Led driver, charging device, static power supply unit ...
- power supply unit type: AC/DC, DC/DC, AC/AC (stabilization of current or voltage), uninterruptable power supply unit (AC/DC, DC/DC, AC/AC)
- enclosure type: Enclosed, Wall Mount, Plastic Enclosure, Open Frame (specify when necessary, e.g. IP67)
- enclosure size/structural element size:
- overall dimensions of the printed-circuit board, mounting seats, outputs configuration - drawing
- operation temperature range: -20 ... +65
- input voltage:
- output power, Wt:
- input voltage, V:
- output voltage, V1, V2, V3...:
- the need to adjust the output voltage, adjustment range:
- input connector type:
- output connector type:
- mode identification: LED
- efficiency factor (min.):
- PFC (yes, no, factor):
- $\cos \varphi$  (for LED):
- control inputs/outputs:
- additional outputs:

You should only send your technical specifications using our order form, and most likely that we already have the solution to your problem with power supply!



Example of ps drawing



Ready-made power supply

**FARADAY Electronics** is taking the applications for the ps units design and manufacture according to your technical specification.

Minimum order scope - 2000 pieces.

Samples estimated availability date - 20 days. Batch production term: 15 days + delivery.



- MPPT technology
- Comprehensive LCD screen
- Controllability via Ethernet network
- Cold start function
- 100% overload protection on each channel
- Configurable AC/solar charger priority
- Batteries protected from full discharge and overcharge
- Easy-accessible operation buttons
- 220V voltage pure sine wave output
- Portable uninterruptible power support

**Specification:**

Model		4kVA/3200W	5kVA/4000W	8kVA/4800W
Default battery system voltage		48VDC	48VDC	48VDC
Output	Surge power	8kVA	10kVA	20 kVA
	Waveform	Pure sine		
	AC voltage regulation (battery mode)	230VAC±5%		
	Inverter efficiency (peak)	93%		
	Transfer time	10ms for PC, 20ms for household appliances		
Input AC	Voltage	230VAC		
	Selectable voltage range	170-280VAC for PC, 90-280VAC for others		
	Frequency range	50Hz/60Hz (autodetection)		
Battery	Nominal voltage	48VDC		
	Floating charge voltage	54VDC		
	Overcharge protection	60VDC		62.8VDC
	Maximum PV array power	3200W		
Solar charger & AC charger	Maximum PV array open circuit voltage	105VDC		147VDC
	Standby power consumption	2W		
	Maximum solar charge current	50A		60A
	Maximum AC charge current	60A		40A
	Maximum charge current	120A		40A
Dimensions	Size	297.5x468x125		414x575x211
	Weight	9.8 kg		48+2.5 kg
Other	Humidity	5% - 95% (non-condensing)		
	Operating ambient temperature	0°C-55°C		
	Storage temperature	-15°C-60°C		

Controller is central monitoring device in self-contained utility systems. Its functions are: all connected devices' state control, batteries charging rate examination, solar panels voltage monitoring, system failures search and error reporting.

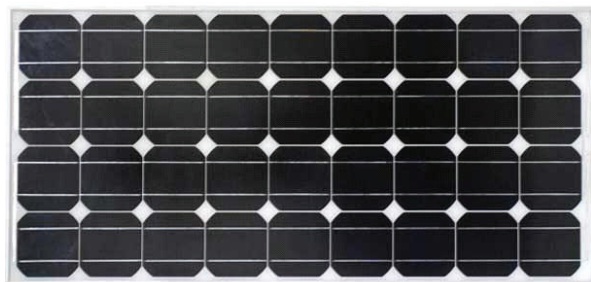
Flexible system configuration allows to set such defaults as minimal voltage for charger change, batteries charging current rate and energy consumption priority for solar charger, mains or battery mode.



- MPPT technology
- Comprehensive LED LCD screen
- Controllability via Ethernet network
- Cold start function
- 100% overload protection on each channel
- Configurable AC/solar charger priority
- Batteries protected from full discharge and overcharge
- Easy-accessible button operation
- Pure sine wave output 220V voltage
- Uninterruptible power support with portable size

**Specification:**

Model		12.5kVA/10kW	15kVA/12kW
Default battery system voltage		48VDC	48VDC
Output	Surge rating (20ms)	30kW	36 kW
	Capable of starting electric motor	5 hp	6 hp
	Output waveform	Pure sine / same as input (bypass mode)	
	Inverter efficiency (Peak)	>88%	
	Line mode efficiency	>95%	
	Power factor	0.8	
	Nominal output voltage RMS	220V/230V/240VAC(±10%)	
	Output frequency	50Hz/60Hz ±0.3 Hz	
	Short circuit protection	Yes(1s after fault)	
	Typical transfer time	10ms	
AC Input	Voltage	230VAC	
	Selectable voltage range	155-280VAC (for PC)	
	Frequency range	50Hz/60Hz, 40-80Hz	
Battery	Minimum start voltage	40.0VDC/42.0VDC	
	Low battery alarm	42.0VDC±0.6V	
	Low battery cutoff	40.0VDC±0.6V	
	High voltage alarm	64.0VDC±0.6V	
	High battery voltage recover	62.0VDC±0.6V	
	Idle consumption-search Mode	<25W	
AC charger	Output voltage	Depends on battery type	
	Charger AC input breaker rating	50 A	63 A
	Max charge power rating	1/3 rating power	
	Overcharge protection S.D.	62.8VDC	
	Max charging rate	80 A	100 A
Bypass & protection	Input voltage waveform	Sine wave (grid or generator)	
	Nominal voltage	220V/230V/240VAC	
	Max input AC voltage	300VAC for 230VAC HV mode	
	Nominal input frequency	50Hz/60Hz	
	Overload protection (SMPS Load)	Circuit breaker	
	Output short circuit Protection	Circuit breaker	
	Bypass breaker rating	63 A	
	Max bypass current	80 A	
	Rated voltage	24VDC/48VDC	
	Maximum PV charge current	60 A (120A Optional)	
Solar charger	DC voltage	48V	
	Maximum PV array power	3200W (6400W for 120A)	
	MPPT range operating voltage (VDC)	64-145VDC	
	Maximum PV array open circuit voltage	147VDC	
	Maximum efficiency	>98%	
	Standby power consumption	<2W	
	Mounting	wall mount	
Dimentions	Size	414x645x211	
	Weight	76+2.5 kg	76+2.5 kg
	Humidity	5% - 95% (non-condensing)	
Other	Operating ambient temperature	0°C to 40°C	
	Storage temperature	-15°C-60°C	
	Display	LED+LCD	



25 years warranty  
 Trivial connection procedure  
 Block connection possibility  
 Ecological electricity production  
 Energy calculations according to feed-in tariff  
 Fully self-generated power supply  
 Electricity generation even if it's cloudy or dusk  
 Monocrystalline silicon solar cells are  
 the most productive & longliving

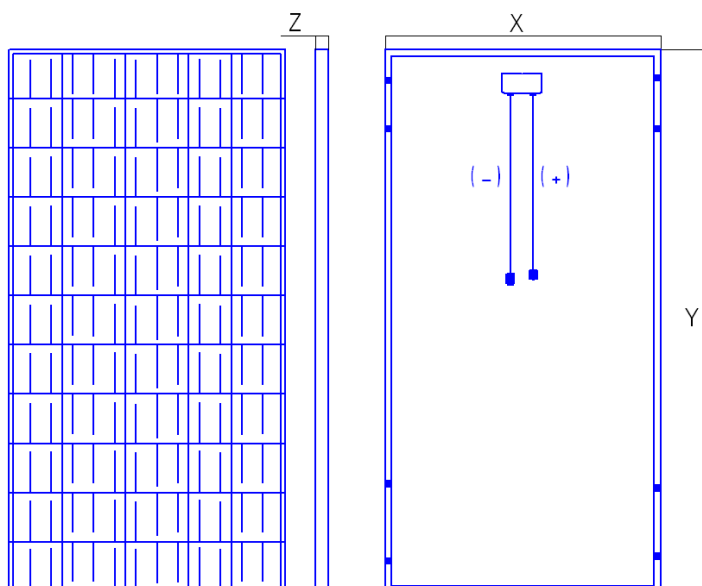
**Specification:**

Model	100W	200W	250W	300W	330W
Max power (W)	100W	200W	250W	300W	330W
Cell type	monocrystalline silicon solar cells				
Max system voltage (V)	1000VDC				
Power Tolerance (%)	±3%				
Open circuit voltage(V)	43	30	37.5	45.2	45.9
Short circuit current(A)	6.42	8.56	8.56	8.56	9.13
Max power voltage(V)	34.5	24.6	30.8	37.2	38.6
Max power current(A)	5.8	8.13	8.12	8.06	8.49
Temperature coefficients of ISC(%)	+0.033				
Temperature coefficients of VOC(%)	-0.32				
Temperature coefficients of Pm(%)	0.44				
Operating ambient temperature (°C)	-40 to + 85°C				
Cells efficiency(%)	18	16.8	17.2	17.4	18.2
Solar cells (pcs*pcs)	6*6	6*8	6*10	6*12	6*12
Dimensions	x (width)	808	992	992	992
	y (length)	1580	1320	1650	1956
	z (height)	35	35	40	45
Weight (kg)	12.5	14.5	17	22	22

There are three types of solar cells on the market that differ in efficiency, performance and lifespan.

**FARADAY Electronics®**

manufactures panels out of monocrystalline silicon solar cells to provide the most efficient, long living and optimal solution for our customers.





Transmitter unit frequency 433.92MHz

Radio range up to 70 m

Four buttons "master" pendant

Opening door audio signal

Programming mode indication

Nonvolatile memory

Two pendants in a package

Programming with "master" controller

Design to operate 12-24 VDC electric lock

Enclosure size 45x28x114 mm

Pendant's power supply is CR2016 battery

5 control panels memory

Overload protection with automatic recovery

12-24VDC, (1 - 0.5 Amp) external output

**Specification:**

Output	Rated power	<b>18 W</b>
	DC voltage	<b>12-24V</b>
	DC adjustable voltage range	11.5-24.5 V
	Rated current	12V @ 1.5A; 24V @ 0.75A
	Output voltage noise and ripples <sup>1</sup>	≤0.5%
	PWM frequency	65kHz (22kHz without load)
	Temperature regulation	≤1%
Input	Output voltage setup time	1500ms
	Voltage range	100-240VAC (94VAC Min, 264VAC Max) 150-380VDC
	Frequency range	47 ~ 63Hz
	Efficiency	>87%@12V, >90%@24V
	Open-circuit power	≤2.0W
Protection	Inrush current	40A max
	Max output power	21W
Environment	Protection type	full auto
	Operating ambient temperature	- 15 °C to + 65 °C
	Storage temperature	-40 °C to +85 °C (humidity 10%~90%)
	Humidity (non-condensing)	20%~90%
	Vibration	10-500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes
Safety & EMC	Confirmed safety standards	IEC61000-3-2:2004, EN61000-3-3:2004, EN55013:2004, EN55020:2003, IEC60065:2009
	Input/output breakdown voltage	3000V/60s/5mA
	Input/ground breakdown voltage	1500V/60s/5mA
	Output/ground breakdown voltage	500V/60s/5mA
	Insulation resistance (input/output, input/ground, output/ground)	100MΩ ±500V
Others	MTBF	50 000 hours
	Warranty	<b>2 years</b>
	Packaging	white box, 100 pieces per carton
	supply package	module, 2 pendants, input/output cable
	Weight	70 g.



Practical control access device

Variety of constructions to fit every refrigerated cabinet

Reliable design

**Device description**

Model name	Model description	Counterpart description	Counterpart view	Blocking part description	Lock view
<b>lock 1 b1</b>	Electromechanical lock, designed to control opening/closing of single-door refrigerated cabinet hinged door	Corner bracket with one bending and movable hook. To be anchored on a door profile inside refrigerated cabinet.		Plastic lifting body with a metal nab solenoid inside. To be anchored inside on a refrigerated cabinet wall. Working part is relative to corner bracket movable hook.	
<b>lock 1 b2 ATTACHABLE (inner)</b>	Electromechanical lock, designed to control opening/closing of refrigerated cabinet sliding door	Corner bracket with two bendings and movable hook. To be anchored on a door profile inside/outside refrigerated cabinet.		Plastic lifting body with a metal nab solenoid inside. To be anchored at door profile butt end.	
<b>lock 2 ATTACHABLE (inner/external)</b>	Electromechanical lock, designed to control opening/closing of refrigerated cabinet sliding doors	Especially formed section hook. To be anchored under apron rolls fixation bolts inside door profile.		Plastic lifting body with a metal nab solenoid inside.	
<b>lock 4 ATTACHABLE (external)</b>	Electromechanical lock, designed to control opening/closing of single-door refrigerated cabinet hinged door	Case consists of two metal elements with a movable metal hook inside. To be anchored outside refrigerated cabinet door profile.		Case consists of two metal elements with a metal nab solenoid inside. To be anchored outside on a refrigerated cabinet wall.	
<b>lock 5 ATTACHABLE (external)</b>	Electromechanical lock, designed to control opening/closing of single-door refrigerated cabinet hinged door	Corner bracket, to be anchored on a door profile outside refrigerated cabinet.		Case with a metal nab solenoid inside. To be anchored outside on a refrigerated cabinet wall.	

The manufacturer reserves the right to make changes to the design and ps circuits as long as it is not impairing its performance.



Cash point is the safety deposit box, it's cells can be accessed only after the cash point activation pre-programmed time outflow. Using cash points build confidence in the cashiers safety wherever they work - in exchange offices, banks cash offices, fuel filling stations and supermarkets. Attack on cashier's workplace equipped with the cash point becomes meaningless - it is useless for the attacker to demand the immediate opening of the cash point.

**Specification:**

Number of boxes	3
Top box	cash drop box
Middle box	collector's box
Bottom box	for documents and stamps
Mode indication	LCD display with backlight
Audio signal	ticker
Opening time delay	from 0 to 360 s (5 s iteration)
Input «alarm button»	+
Cash point blocked by alarm button	30 minutes
Security system (relay) output	+
Ethernet port	+
USB port	+
Memory capacity	9000 events
Total cards' amount	5
Cashier cards' amount	3
Collector cards' amount	1
Technician cards' amount	1
Battery life	no less than 24 hours (200 openings)
Locks	electromechanical
Input power	75 W
Input voltage	100-260V/47-64 Hz
Size (WxLxH)	450x600x650
Weight	70 kg
Warranty	2 years
Vendor package	cash point, network cable, 5 cards

**Use modern techniques**

You should equip the cashier workplace with cash points with time delay. Cash enclosure is made of cold-rolled steel with 2 mm thickness, another features are the anchorage with the floor and optional connection to the security system of the bank, which is possible with the remote panic button to lock the cash point and control the alarm signal.


**Distinctive features**
**Case**

- Cash point enclosure ergonomic design has no protruding parts or sharp edges.
- The boxes are equipped with fully retractable heavy-duty ball guides.
- Lock actuator and girth rail mechanism located at the rear of the cash point and protected by additional metal sheet and closed enclosure.
- The cash point is equipped with the vandal-resistant stainless steel buttons.
- The cash point base is equipped with the weighted faceplate for clamping (anchoring) the product on the floor.
- In case of mechanical destruction of LCD indicator zone it has its own penetration protection.

**Functions:**

- The rapid opening of any box with the collector proximity card (which is unique for each product).
- Uninterrupted power supply system is meant for 24h operation, and it is possible to increase the capacity by 2 times.
- Built-in real-time clock, perpetual calendar, the current date and time display.
- LCD display (4 lines of 20 characters) with the backlight provides immediate opening / closing shift indication, all modes indication.
- The start and end of the shiftwork activation by the cashier proximity card (unique for each item).
- Logging the cash point events specifying the event code, date, time; cashiers, collectors, technicians proximity cards' serial numbers; time of USB and LAN ports connection and disconnect; opening and closing boxes in standard or delay modes.
- Locks are equipped with the wear-resistant electric drives with extended service life and moisture protection.
- Closing/opening sensors for each of three boxes.
- The date and time synchronizing, functions setting, logs reading using USB and LAN interfaces.
- Each of three boxes can be opened separately and independently by pressing corresponding button with preprogrammed delay time.
- Cancelling the opening time delay by pressing the corresponding button.
- Emergency (keyless) opening the boxes only by customer service, even without power supply.
- Immediate device modes programming by the technician proximity card access.
- Every technicians' card memorization.
- Acknowledging beep when entering modes and menu items.
- Locking all the boxes for 30 minutes in the case of the alarm button signal or keypad.
- The collector box opening with only two cards - the cashier or collector ones.



**Notes:**