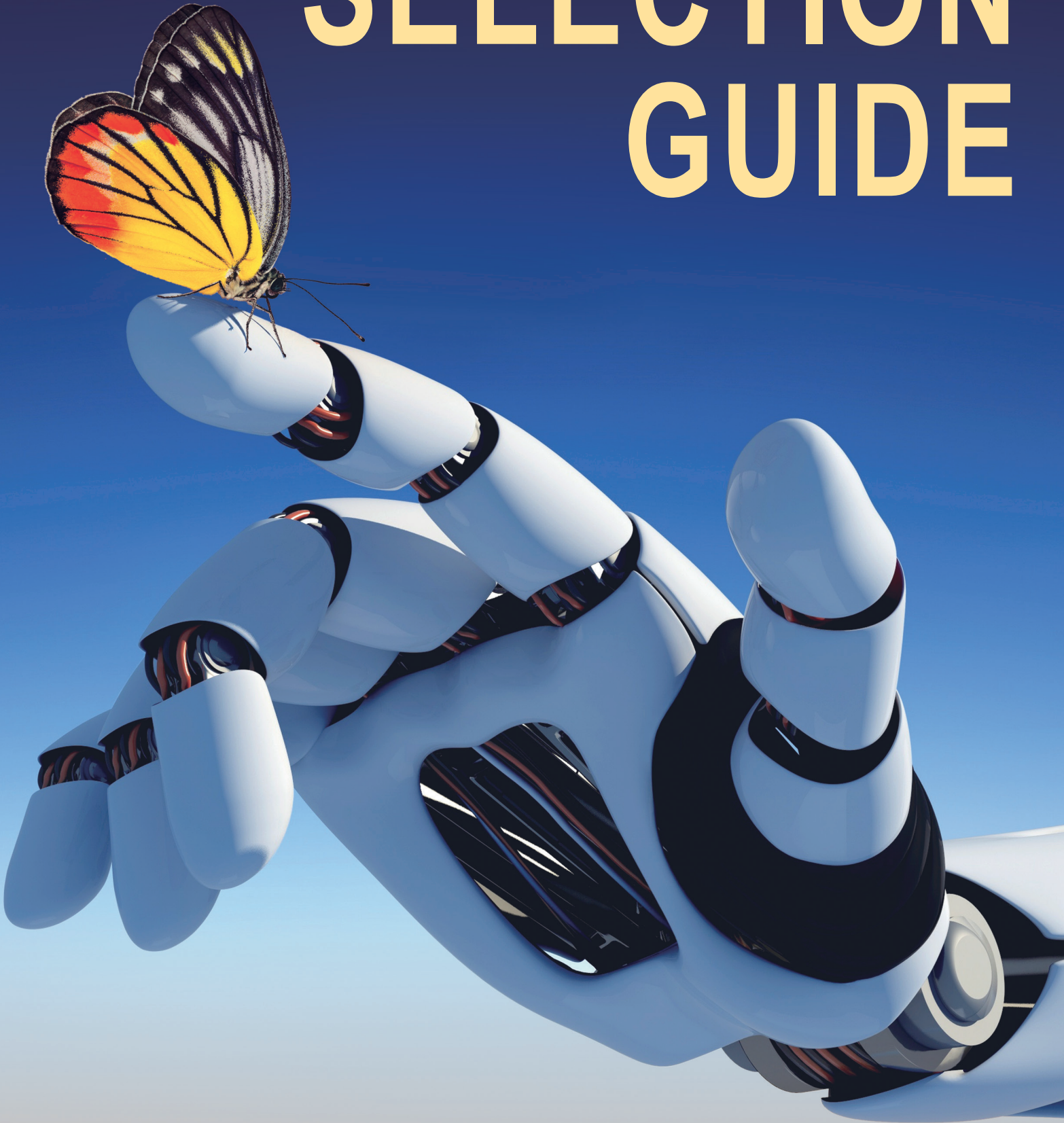


# SELECTION GUIDE



# POWERGOOD Product Model Number Structure

## AC / DC Part Number Structure

ACQ100 - 120 S - 100

Series Name	Output Voltage (VDC)	Output Quantity	Output Power (W)
ACE25	050: 5	S : Single	
ACE60	120: 12		
ACQ100	150: 15		
ACH250	240: 24		
ACF700	280: 28		
ACO100	360: 36		
ACO250	480: 48		

## DC / DC Part Number Structure

SQB - 018 120 - S - P - B 100

Series Name	Input Voltage (VDC)	Output Voltage (VDC)	Output Quantity	Remote Control Option	Shape	Output Power (W)
ESB	012: 9-18	033: 3.3	S : Single	P : Positive	F : Flat	
ESC	018: 9-36	050: 5	(Dosa pin out)	logic	(Baseplate	
STB	024: 18-36	120: 12	D : Dual	N : Negative	without Flange)	
SQB	036: 18-75	150: 15	V : Vicor pin out	logic	P : PV	
SHB	048: 36-75	240: 24			(Heat sink embedded)	
SFB	110: 40-160	280: 28			B : Baseplate	
	(40-180)	480: 48			(with Flange)	
	300: 180-425	050: ± 5				
MQB	028: 9-75	120: ±12				
	054: 14-154	150: ±15				
		240: ±24				

## DC / DC Encapsulated-Bricks-S Part Number Structure

SQBS - 024W 120 - S - P - B 100

Series Name	Input Voltage (VDC)	Output Voltage (VDC)	Output Quantity	Remote Control Option	Shape	Output Power (W)
ESAS	024W: 9-36	050: 5	S : Single	P : Positive	F : Flat	
ESBS	048W: 18-75	120: 12	(Dosa pin out)	logic	(Baseplate	
ESCS	024 : 18-36	150: 15	D : Dual	N : Negative	without Flange)	
SQBS	048 : 36-75	240: 24	V : Vicor pin out	logic	B : Baseplate	
SHBS	110 : 40-160	280: 28			(with Flange)	
SFBS	(40-180)	480: 48				
	300 : 180-425	120: ±12				
		150: ±15				

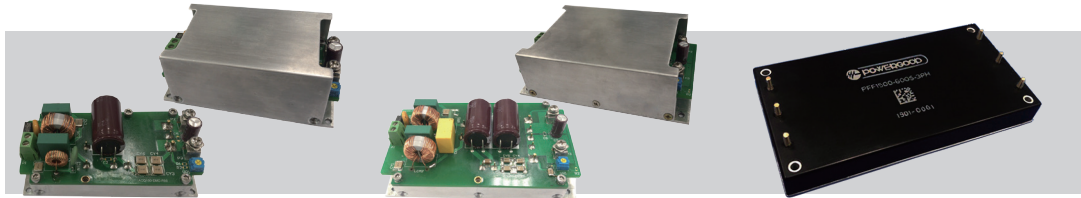
## AC to DC Encapsulated Bricks



Series	ACE25	ACE60	ACQ100	ACH250	ACF700
Features	<ul style="list-style-type: none"> <li>2"X1" compact size</li> <li>50W Peak load Capability</li> <li>Easy Hold-up time extension</li> <li>Low No Load Power Consumption&lt;0.3W</li> <li>Low leakage current 100uA</li> <li>±10% Output Trimming Function</li> </ul> <b>OCP OVP OTP SCP</b>	<ul style="list-style-type: none"> <li>2"X2" compact size</li> <li>120W Peak load Capability</li> <li>Easy Hold-up time extension</li> <li>Low No Load Power Consumption&lt;0.5W</li> <li>Low leakage current 100uA</li> <li>±10% Output Trimming Function</li> </ul> <b>OCP OVP OTP SCP</b>	<ul style="list-style-type: none"> <li>Quarter Brick size</li> <li>No aluminum and tantalum electrolytic capacitor inside for High Reliability</li> <li>Easy Hold-up time extension</li> <li>Baseplate cooled</li> <li>Built-in Active PFC</li> </ul> <b>OCP OVP OTP SCP</b>	<ul style="list-style-type: none"> <li>Half Brick size</li> <li>No aluminum and tantalum electrolytic capacitor inside for High Reliability</li> <li>Easy Hold-up time extension</li> <li>Baseplate cooled</li> <li>Built-in Active PFC</li> </ul> <b>OCP OVP OTP SCP</b>	<ul style="list-style-type: none"> <li>Full Brick size</li> <li>No aluminum and tantalum electrolytic capacitor inside for High Reliability</li> <li>Easy Hold-up time extension</li> <li>Built-in Active PFC</li> <li>Parallel function</li> </ul> <b>OCP OVP OTP SCP</b>
Output Power (W)	25W	60W	100W	250W	700W
Input Voltage (VAC)	90 ~ 264	90 ~ 264	90 ~ 264	90 ~ 264	90 ~ 264
Output Voltage (VDC)	5, 12, 15, 24, 36, 48	5, 12, 15, 24, 36, 48	5, 12, 24, 28, 36, 48	12, 24, 28, 36, 48	24, 28, 36, 48
Efficiency	Up to 88%	Up to 90%	Up to 91%	Up to 91%	Up to 90%
Isolation	Up to 4000VAC	Up to 4000VAC	Up to 3000VAC	Up to 3000VAC	Up to 3000VAC
Dimension	2.10" x 1.10" x 0.96"	2.10" x 2.10" x 1.10"	2.36" x 1.57" x 0.50"	2.36" x 2.30" x 0.50"	4.62" x 2.36" x 0.50"
Case Temperature	-40°C ~ +80°C	-40°C ~ +80°C	-40°C ~ +100°C	-40°C ~ +100°C	-40°C ~ +100°C
Package	Plastic case	Plastic case	Aluminum base with plastic case	Aluminum base with plastic case	Aluminum base with plastic case
EMI	EN55032 Class B	EN55032 Class B	EN55032 Class B (with external filter)	EN55032 Class B (with external filter)	EN55032 Class B (with external filter)
Safety					
Warranty	2 Years	2 Years	3 Years	3 Years	3 Years

**Applications** ■ Wireless Network ■ Telecom / Data Communication ■ Industrial Control System ■ Semiconductor Equipment ■ Medical Application

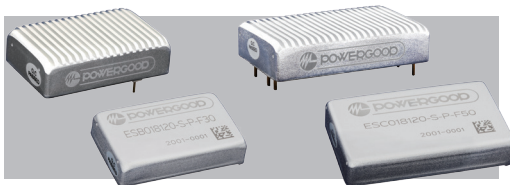
## AC to DC PSU 3-Phase PFC



Series	ACO100	ACO250	PFF1500-600S-3PH
Features	<ul style="list-style-type: none"> <li>2" x 4" size</li> <li>Built-in Radiator</li> <li>Terminal block design and easy to use</li> <li>Baseplate cooled</li> <li>Built-in Active PFC</li> </ul> <b>OCP OVP OTP SCP</b>	<ul style="list-style-type: none"> <li>3" x 5" size</li> <li>Built-in Radiator</li> <li>Terminal block design and easy to use</li> <li>Baseplate cooled</li> <li>Built-in Active PFC</li> </ul> <b>OCP OVP OTP SCP</b>	<ul style="list-style-type: none"> <li>3-Phase Full Brick PFC</li> <li>No aluminum and tantalum electrolytic capacitor inside for High Reliability</li> <li>Compatible with 50 60 400Hz system</li> <li>Baseplate cooled</li> <li>Built-in Active PFC</li> </ul> <b>OCP OVP OTP SCP</b>
Output Power (W)	100W	250W	1500W
Input Voltage (VAC)	90 ~ 264	90 ~ 264	380VAC ±10%
Output Voltage (VDC)	5, 12, 24, 28, 36, 48	12, 24, 28, 36, 48	600
Efficiency	Up to 91%	Up to 91%	Up to 97%
Isolation	Up to 3000VAC	Up to 3000VAC	Non-Isolated
Dimension	4.00" x 2.06" x 1.57"	5.00" x 3.03" x 1.57"	4.62" x 2.36" x 0.52"
Case Temperature	-40°C ~ +100°C	-40°C ~ +100°C	-40°C ~ +100°C
Package	Open Frame & Aluminum case	Open Frame & Aluminum case	Aluminum base with plastic case
EMI	EN55032 Class B	EN55032 Class B	EN55032 Class B (with external filter)
Safety			
Warranty	3 Years	3 Years	3 Years

**Applications** ■ Wireless Network ■ Telecom / Data Communication ■ Industrial Control System ■ Semiconductor Equipment ■ Medical Application

## Encapsulated-E



Series	ESB	ESC
Features	<ul style="list-style-type: none"> <li>Built-in EMI filter</li> <li>Wide range operating temperature</li> <li>Single / Dual Outputs</li> <li>+70°C without derating</li> </ul> <b>UVLO OCP OVP OTP</b>	<ul style="list-style-type: none"> <li>Built-in EMI filter</li> <li>Wide range operating temperature</li> <li>Single / Dual Outputs</li> <li>+70°C without derating</li> </ul> <b>UVLO OCP OVP OTP</b>
Output Power (W)	15W ~ 30W	20W ~ 50W
Input Voltage (VDC)	9~18, 9~36, 18~36, 18~75, 36~75	9~18, 9~36, 18~36, 18~75, 36~75, 40~160
Output Voltage (VDC)	3.3, 5, 12, 15, 24, ±5, ±12, ±15, ±24	3.3, 5, 12, 15, 24, ±12, ±15, ±24
Efficiency	Up to 91%	Up to 90%
Isolation	Up to 2250VDC	Up to 2250VDC
Dimension	1.6" x 1.0" x 0.40" (Flat) 1.6" x 1.0" x 0.50" (Heat sink embedded)	2.00" x 1.00" x 0.40" (Flat) 2.00" x 1.20" x 0.50" (Heat sink embedded) 2.00" x 1.60" x 0.45" (Baseplate)
Case Temperature	-45°C ~ +115°C -55°C ~ +125°C (Optional)	-45°C ~ +115°C -55°C ~ +125°C (Optional)
Package	Heat sink embedded & Flat	Heat sink embedded & Flat & Baseplate
EMI	EN55032 Class A & Class B	EN55032 Class A & Class B
Safety		
Warranty	3 Years	3 Years

**Applications** ■ Railway Application ■ Aviation Use ■ Wireless Network ■ Telecom / Data Communication  
■ Industrial Control System ■ Semiconductor Equipment

## Encapsulated-S



Series	ESAS	ESBS	ESCS
Features	<ul style="list-style-type: none"> <li>Built-in EMI filter</li> <li>Wide range operating temperature</li> <li>Single / Dual Outputs</li> <li>SMD optional</li> <li>+70°C without derating</li> </ul> <b>UVLO OCP OVP OTP</b>	<ul style="list-style-type: none"> <li>Built-in EMI filter</li> <li>Wide range operating temperature</li> <li>Single / Dual Outputs</li> <li>+70°C without derating</li> </ul> <b>UVLO OCP OVP OTP</b>	<ul style="list-style-type: none"> <li>Built-in EMI filter</li> <li>Wide range operating temperature</li> <li>Single / Dual Outputs</li> <li>+60°C without derating</li> </ul> <b>UVLO OCP OVP OTP</b>
Output Power (W)	15W	20W ~ 30W	40W ~ 50W
Input Voltage (VDC)	9~36, 18~75, 40~160	9~36, 18~36, 18~75, 40~160	9~36, 18~36, 18~75, 40~180
Output Voltage (VDC)	5, 12, 15, ±12, ±15	5, 12, 15, ±12, ±15	5, 12, 15, ±12, ±15
Efficiency	Up to 88%	Up to 88%	Up to 89%
Isolation	Up to 1600VDC	Up to 2000VDC	Up to 2000VDC
Dimension	1.27" x 0.65" x 0.40" (DIP 24) 1.27" x 0.65" x 0.40" (SMD 24)	1.00" x 1.00" x 0.40"	2.00" x 1.00" x 0.40"
Case Temperature	-40°C ~ +100°C	-40°C ~ +100°C	-40°C ~ +100°C
Package	DIP 24, SMD 24 (Metal or PVC)	Flat	Flat
EMI	EN55032 Class A	EN55032 Class A	EN55032 Class A
Safety			
Warranty	3 Years	3 Years	3 Years

**Applications** ■ Railway Application ■ Aviation Use ■ Wireless Network ■ Telecom / Data Communication  
■ Industrial Control System ■ Semiconductor Equipment

## Bricks-B



Series	STB (1 / 16 Brick compliant)	SQB (1 / 8 - 1 / 4 Brick compliant)	SHB (1 / 2 Brick compliant)	SFB (Full Brick)	MQB (1 / 4 Brick compliant)
Features	<ul style="list-style-type: none"> <li>DOSA pin out</li> <li>Wide range operating temperature</li> <li>Ceramic Capacitor design</li> <li>Provides predictable EMI</li> <li>No minimum load requirement</li> </ul> <b>UVLO OCP OVP OTP</b>	<ul style="list-style-type: none"> <li>DOSA pin out / Vicor pin out</li> <li>Wide range operating temperature</li> <li>Ceramic Capacitor design</li> <li>Provides predictable EMI</li> <li>No minimum load requirement</li> </ul> <b>UVLO OCP OVP OTP</b>	<ul style="list-style-type: none"> <li>DOSA pin out / Vicor pin out</li> <li>Wide range operating temperature</li> <li>Ceramic Capacitor design</li> <li>Provides predictable EMI</li> <li>No minimum load requirement</li> </ul> <b>UVLO OCP OVP OTP</b>	<ul style="list-style-type: none"> <li>DOSA pin out / Vicor pin out</li> <li>Wide range operating temperature</li> <li>Ceramic Capacitor design</li> <li>Provides predictable EMI</li> <li>Optional parallel output</li> </ul> <b>UVLO OCP OVP OTP</b>	<ul style="list-style-type: none"> <li>DOSA pin out</li> <li>8:1 &amp; 12:1 Ultra-Wide input voltage</li> <li>Wide range operating temperature</li> <li>Single / Dual / Multi output</li> <li>Provides predictable EMI</li> <li>No minimum load requirement</li> </ul> <b>UVLO OCP OVP OTP</b>
Output Power (W)	40W ~ 60W	100W ~ 150W	200W ~ 300W	400W ~ 600W	50W ~ 75W
Input Voltage (VDC)	9~18, 9~36, 18~36, 18~75, 36~75	9~36, 18~36, 18~75, 40~180, 180~425	9~36, 18~36, 18~75, 40~180, 180~425	9~36, 18~36, 18~75, 40~180, 180~425	9~75, 14~154
Output Voltage (VDC)	3.3, 5, 12, 15, 24	5, 12, 24, 28, 48	5, 12, 24, 28, 48	12, 24, 28, 48	5, 12, 15, 24, ±12, ±15, ±24
Efficiency	Up to 91%	Up to 92%	Up to 92%	Up to 91%	Up to 90%
Isolation	Up to 2250VDC	Up to 2250VDC	Up to 2250VDC	Up to 2250VDC	Up to 2250VDC
Dimension	1.48" x 1.08" x 0.52" (Flat) 1.49" x 1.46" x 0.52" (Baseplate)	2.38" x 1.08" x 0.56" (1/8 Flat) 2.38" x 1.47" x 0.56" (1/4 Baseplate)	2.42" x 2.40" x 0.59"	4.62" x 2.40" x 0.59"	2.36" x 1.57" x 0.49"
Case Temperature	-45°C ~ +105°C	-45°C ~ +105°C -55°C ~ +125°C (Optional)	-45°C ~ +105°C -55°C ~ +125°C (Optional)	-45°C ~ +105°C -55°C ~ +125°C (Optional)	-45°C ~ +105°C
Package	6-side baseplate & Flat	6-side baseplate & Flat	6-side baseplate	6-side baseplate	6-side baseplate
Safety					
Warranty	3 Years	3 Years	3 Years	3 Years	3 Years

**Applications** ■ Railway Application ■ Aviation Use ■ Wireless Network ■ Telecom / Data Communication  
 ■ Industrial Control System ■ Semiconductor Equipment

## Bricks-S



Series	SQBS (1 / 8 - 1 / 4 Brick compliant)	SHBS (1 / 2 Brick compliant)	SFBS (Full Brick)
Features	<ul style="list-style-type: none"> <li>DOSA pin out / Vicor pin out</li> <li>Wide range operating temperature</li> <li>Ceramic Capacitor design</li> <li>Provides predictable EMI</li> <li>No minimum load requirement</li> </ul> <b>UVLO OCP OVP OTP</b>	<ul style="list-style-type: none"> <li>DOSA pin out / Vicor pin out</li> <li>Wide range operating temperature</li> <li>Ceramic Capacitor design</li> <li>Provides predictable EMI</li> <li>No minimum load requirement</li> </ul> <b>UVLO OCP OVP OTP</b>	<ul style="list-style-type: none"> <li>Vicor pin out</li> <li>Wide range operating temperature</li> <li>Ceramic Capacitor design</li> <li>Provides predictable EMI</li> </ul> <b>UVLO OCP OVP OTP</b>
Output Power (W)	50W ~ 100W	50W ~ 100W	50W ~ 100W
Input Voltage (VDC)	9~36, 18~36, 18~75, 40~180, 180~425	9~36, 18~36, 18~75, 40~180, 180~425	9~36, 18~36, 18~75, 40~180, 180~425
Output Voltage (VDC)	12, 24, 28, 48	5, 12, 24, 28, 48	5, 12, 24, 28, 48
Efficiency	Up to 89%	Up to 89%	Up to 89%
Isolation	Up to 2250VDC	Up to 2250VDC	Up to 2250VDC
Dimension	2.38" x 1.08" x 0.56" (1 / 8 Flat) 2.38" x 1.47" x 0.56" (1 / 4 Baseplate)	2.42" x 2.40" x 0.59"	4.62" x 2.40" x 0.59"
Case Temperature	-40°C ~ +100°C	-40°C ~ +100°C	-40°C ~ +100°C
Package	6-side baseplate & Flat	6-side baseplate	6-side baseplate
Safety			
Warranty	3 Years	3 Years	3 Years

**Applications** ■ Railway Application ■ Aviation Use ■ Wireless Network ■ Telecom / Data Communication  
 ■ Industrial Control System ■ Semiconductor Equipment



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