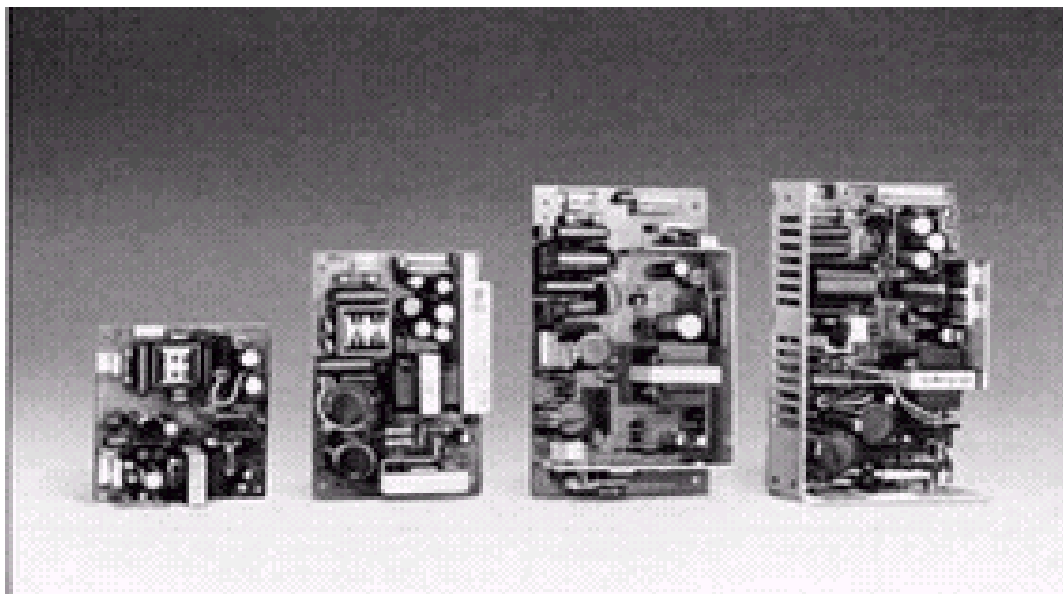


SUM SERIES

Single Output / Multiple Outputs, Universal Input Switch Mode Power Supplies

Features:

- Cost-effective power source
- Universal input
- Single and multiple outputs
- Built-in EMI filter
- Meets UL, CSA and VDE safety approvals
- Meets FCC Class B, VDE 0871 Class B



Sanken

Sanken/Allegro 3100 Tower Blvd. 5th Fl. University Tower, Durham, NC27707 Phone: (888)888-4914 Fax: (919)402-8540
E-mail: allegro@intrex.net

	Rating	5 W		10 W	
		SDA005-05	SDA005-12	SDA010-05	SDA010-12

			Rating	15 W (2 Channels)	
Item			Conditions	SUM015-01	
Input	Rated Input Voltage		AC115V / 230V		
	Input Voltage Range		AC90~135V / 180~270V		
	Input Current	Rated input/output conditions	0.5A / 0.3A		
	Inrush Current		20A / 40A		
	Rated Frequency Range		50/60Hz (Frequency Range 45~65Hz)		
	Power Factor		N/A		
	Harmonic Attenuator		N/A		
	Efficiency(typ)	Rated input/output conditions	65%		
Output	Rated Output Voltage		+5V	+12V	
	Adjustable Output Voltage Range		Fixed		
	Rated Output Current		1.0A	1.0A	
	Adjustable Output Current Range		0.1~1.0A		
	Maximum Output Power		15W		
	Ripple Noise(mVp-p)	Rated input/output condition	100	170	
	Constant Voltage Accuracy		±5%		
Other	Leakage Current	Rated input/output conditions	0.5mA / 0.75mA (max)		
	Startup Time		100ms (typ)		
	Switching Method, Operating Frequency		RCC topology, approx. 30kHz (under rated input/output conditions)		
	Output Holdup Time	Rated input/output conditions	20ms (typ)		
Additional Functions	Over Current Protection		Detection above 150%	Detection above 120%	
	Over Voltage Protection		5.8~6.8V	N/A	
	Remote Sensing		N/A		
	Remote On/Off Control		N/A		
	Thermal Protection		N/A		
	Parallel Operation		N/A		
	Protection Circuit Display		N/A		
	Display		Not Provided		
Environmental	Operating Temperature		0~+50°C		
	Storage Temperature		-25~+80°C		
	Operating Humidity		30~90% (No Condensation)		
	Storage Humidity				
Insulation	Insulation Withstad Voltage	Input to Output	AC1500V for 1 minute		
		Input to Frame			
		Output to Frame			
	Insulation Resistance	Input to Output	100MΩ (measured with 500V DC Megger)		
		Input to Frame			
		Output to Frame			
Structural Specifications	Vibration Resistance		10~55Hz 2.5G 1 hour (X, Y, and Z directions vibration time)		
	Cooling Requirements		Natural Convection		
	External Appearance (W x D x H) mm		90 x 100 x 32		
	Weight (g)		140 (max)		
Applicable Standards	Conducted Emissions		FCC Part 15-J Class B (AC115V) VDE0871 Class B (AC230V)		
	Safety Standards		UL478 & 114 CSA Electrical Bulletin 1402C VDE (EN60950)		

			Rating	15 W (Single Output)			
Item			Conditions	SUM015-02	SUM015-03	SUM015-04	SUM015-05
Input	Rated Input Voltage		AC115-230V				
	Input Voltage Range		AC90~135V / 180~270V				
	Input Current	Rated input/output conditions	0.5A / 0.3A				
	Inrush Current		20A / 40A				
	Rated Frequency Range		50/60Hz (Frequency Range 45~65Hz)				
	Power Factor		N/A				
	Harmonic Attenuator		N/A				
	Efficiency(typ)	Rated input/output conditions	65%	68%	73%	80%	
Output	Rated Output Voltage		+5V	+12V	+15V	+24V	
	Adjustable Output Voltage Range		Fixed				
	Rated Output Current		3.0A	1.2A	1.0A	0.6A	
	Adjustable Output Current Range		0~3.0A	0~1.2A	0~1.0A	0~0.6A	
	Maximum Output Power		15W				
	Ripple Noise(mVp-p)	Rated input/output condition	100	150	150	250	
	Constant Voltage Accuracy		±3%				
Other	Leakage Current	Rated input/output conditions	0.5mA / 0.75mA (max)				
	Startup Time		100ms (max)				
	Switching Method, Operating Frequency		RCC topology, approx. 30kHz (under rated input/output conditions)				
	Output Holdup Time	Rated input/output conditions	20ms (max)				
Additional Functions	Over Current Protection		Detection above 120% of rated current				
	Over Voltage Protection		Detection above 115~135% of rated voltage				
	Remote Sensing		N/A				
	Remote On/Off Control		N/A				
	Thermal Protection		N/A				
	Parallel Operation		N/A				
	Protection Circuit Display		N/A				
	Display		Not Provided				
Environmental	Operating Temperature		0~+50°C				
	Storage Temperature		-25~+80°C				
	Operating Humidity		30~90% (No Condensation)				
	Storage Humidity						
Insulation	Insulation Withstad Voltage	Input to Output	AC1500V for 1 minute				
		Input to Frame					
		Output to Frame					
	Insulation Resistance	Input to Output	10MΩ (measured with 500V DC Megger)				
		Input to Frame					
		Output to Frame					
Structural Specifications	Vibration Resistance		10~55Hz 2.5G 1 hour (X, Y, and Z directions vibration time)				
	Cooling Requirements		Natural Convection				
	External Appearance (W x D x H) mm		90 x 100 x 32				
	Weight (g)		Approx. 140				
Applicable Standards	Conducted Emissions		FCC Part 15-J Class B (AC115V) VDE0871 Class B (AC230V)				
	Safety Standards		UL478 & 114 CSA Electrical Bulletin 1402C VDE (EN60950)				

			Rating	30 W (2 Channels)	
Item			Conditions	SUM030-01	
Input	Rated Input Voltage		AC115V / 230V		
	Input Voltage Range		AC90~135V / 180~270V		
	Input Current	Rated input/output conditions	0.9A / 0.5A		
	Inrush Current		20A / 40A		
	Rated Frequency Range		50/60Hz (Frequency Range 45~65Hz)		
	Power Factor		N/A		
	Harmonic Attenuator		N/A		
	Efficiency(typ)	Rated input/output conditions	65%		
Output	Rated Output Voltage		+15V	+12V	
	Adjustable Output Voltage Range		Fixed		
	Rated Output Current		2.0A	2.0A	
	Adjustable Output Current Range		0.1~2.0A		
	Maximum Output Power		30W		
	Ripple Noise(mVp-p)	Rated input/output condition	100	170	
	Constant Voltage Accuracy		±5%		
	Other	Leakage Current	Rated input/output conditions	0.5mA / 0.75mA (max)	
Startup Time		100ms (typ)			
Switching Method, Operating Frequency		RCC topology, approx. 30kHz (under rated input/output conditions)			
Output Holdup Time		Rated input/output conditions	20ms (max)		
Additional Functions	Over Current Protection		Detection above 150% of rated current	Detection above 120% of rated current	
	Over Voltage Protection		Detection approx. 5.8~6.8V	N/A	
	Remote Sensing		N/A		
	Remote On/Off Control		N/A		
	Thermal Protection		N/A		
	Parallel Operation		N/A		
	Protection Circuit Display		N/A		
	Display		N/A		
Environmental	Operating Temperature		0~+50°C		
	Storage Temperature		-25~+80°C		
	Operating Humidity		30~90% (No Condensation)		
	Storage Humidity				
vInsulation	Insulation Withstad Voltage	Input to Output	AC1500V for 1 minute		
		Input to Frame			
		Output to Frame	AC500V for 1 minute		
	Insulation Resistance	Input to Output	100MΩ (measured with 500V DC Megger)		
		Input to Frame			
		Output to Frame			
Structural Specifications	Vibration Resistance		10~55Hz 2.5G 1 hour (X, Y, and Z directions vibration time)		
	Cooling Requirements		Natural Convection		
	External Appearance (W x D x H) mm		140 x 89 x 32		
	Weight (g)		Approx. 270		
Applicable Standards	Conducted Emissions		FCC Part 15-J Class B (AC115V) VDE0871 Class B (AC230V)		
	Safety Standards		UL1950 CSA Electrical Bulletin 1402C VDE (EN60950)		

			Rating	30 W (Single Output)			
Item			Conditions	SUM030-02	SUM030-03	SUM030-04	SUM030-05
Input	Rated Input Voltage		AC115V / 230V				
	Input Voltage Range		AC90~135V / 180~270V				
	Input Current	Rated input/output conditions	0.9A / 0.5A				
	Inrush Current		20A / 40A				
	Rated Frequency Range		50/60Hz (Frequency Range 45~65Hz)				
	Power Factor		N/A				
	Harmonic Attenuator		N/A				
	Efficiency(typ)	Rated input/output conditions	65%	68%	73%	80%	
Output	Rated Output Voltage		+5V	+12V	+15V	+24V	
	Adjustable Output Voltage Range		Fixed				
	Rated Output Current		6.0A	2.5A	2.0A	1.2A	
	Adjustable Output Current Range		0~6.0A	0~2.5A	0~2.0A	0~1.2A	
	Maximum Output Power		30W				
	Ripple Noise(mVp-p)	Rated input/output condition	100	150	150	250	
	Constant Voltage Accuracy		±3%				
	Leakage Current	Rated input/output conditions	0.5mA / 0.75Ma (max)				
Other	Startup Time		100ms (typ)				
	Switching Method, Operating Frequency		RCC topology, approx. 30kHz (under rated input/output conditions)				
	Output Holdup Time	Rated input/output conditions	20ms (max)				
Additional Functions	Over Current Protection		Detection above 120% of rated current				
	Over Voltage Protection		Detection above 115~135% of rated voltage				
	Remote Sensing		N/A				
	Remote On/Off Control		N/A				
	Thermal Protection		N/A				
	Parallel Operation		N/A				
	Protection Circuit Display		N/A				
	Display		N/A				
Environmental	Operating Temperature		0~+50°C				
	Storage Temperature		-25~+80°C				
	Operating Humidity		30~90% (No Condensation)				
	Storage Humidity						
Insulation	Insulation Withstad Voltage	Input to Output	AC1500V for 1 minute				
		Input to Frame					
		Output to Frame	AC500V for 1 minute				
	Insulation Resistance	Input to Output	100MΩ (measured with 500V DC Megger)				
		Input to Frame					
		Output to Frame					
Structural Specifications	Vibration Resistance		10~55Hz 2.5G 1 hour (X, Y, and Z directions vibration time)				
	Cooling Requirements		Natural Convection				
	External Appearance (W x D x H) mm		140 x 89 x 32				
	Weight (g)		Approx. 270				
Applicable Standards	Conducted Emissions		FCC Part 15-J Class B (AC115V) VDE0871 Class B (AC230V)				
	Safety Standards		UL1950 CSA ELECTRICAL Bulletin 1402C VDE (EN60950)				

			Rating		30 W (2 Channels)							
Item			Conditions		SUM030-06		SUM030-07		SUM030-08			
Input	Rated Input Voltage		AC115V / 230V									
	Input Voltage Range		AC90~135V / 180~270V									
	Input Current	Rated input/output conditions		0.9A / 0.5A								
	Inrush Current		20A / 40A									
	Rated Frequency Range		50/60Hz (Frequency Range 45~65Hz)									
	Power Factor		N/A									
	Harmonic Attenuator		N/A									
	Efficiency(typ)	Rated input/output conditions		70%		70%		72%				
Output	Rated Output Voltage		+5V	+24V	+12V	-12V	+15V	-15V				
	Adjustable Output Voltage Range		Fixed									
	Rated Output Current		1.0A		1.2A		1.0A					
	Adjustable Output Current Range		0.2~1.0A		0.1~1.2A		0~1.0A					
	Maximum Output Power		30W									
	Ripple Noise(mVp-p)	Rated input/output condition		100	250	150						
	Constant Voltage Accuracy		±5%									
	Other	Leakage Current	Rated input/output conditions		0.5mA / 0.75Ma (max)							
Startup Time		100ms (typ)										
Switching Method, Operating Frequency		RCC topology, approx. 30kHz (under rated input/output conditions)										
Output Holdup Time		Rated input/output conditions		20ms (max)								
Additional Functions	Over Current Protection		Detection above 120% of rated current									
	Over Voltage Protection		5.8~6.8V	N/A	Detection above 115~135% of rated voltage							
	Remote Sensing		N/A									
	Remote On/Off Control		N/A									
	Thermal Protection		N/A									
	Parallel Operation		N/A									
	Protection Circuit Display		N/A									
	Display		N/A									
Environmental	Operating Temperature		0~+50°C									
	Storage Temperature		-25~+80°C									
	Operating Humidity		30~90% (No Condensation)									
	Storage Humidity											
vInsulation	Insulation Withstad Voltage		Input to Output		AC1500V for 1 minute							
			Input to Frame									
			Output to Frame									
	Insulation Resistance		Input to Output		AC500V for 1 minute							
			Input to Frame									
			Output to Frame									
Structural Specifications	Vibration Resistance		10~55Hz 2.5G 1 hour (X, Y, and Z directions vibration time)									
	Cooling Requirements		Natural Convection									
	External Appearance (W x D x H) mm		140 x 89 x 32									
	Weight (g)		Approx. 270									
Applicable Standards	Conducted Emissions		FCC Part 15-J Class B (AC115V) VDE0871 Class B (AC230V)									
	Safety Standards		UL478 CSA Electrical Bulletin 1402C VDE (EN60950)									

			Rating	50 W (3 Channels)		
Item			Conditions	SUM050-01		
Input	Rated Input Voltage		AC100-120V / 200-240V			
	Input Voltage Range		AC90~135V / 180~270V			
	Input Current	Rated input/output conditions	1.5A / 0.8A			
	Inrush Current		20A / 40A			
	Rated Frequency Range		50/60Hz (Frequency Range 45~65Hz)			
	Power Factor		N/A			
	Harmonic Attenuator		N/A			
	Efficiency(typ)	Rated input/output conditions	65%			
Output	Rated Output Voltage		+5V	+12V	-12V	
	Adjustable Output Voltage Range		Fixed			
	Rated Output Current		5.0A	3.0A	0.3A	
	Adjustable Output Current Range		0.5~5.0A	0.3~3.0A	0~0.3A	
	Maximum Output Power		50W			
	Ripple Noise(mVp-p)	Rated input/output condition	100	100	170	
	Constant Voltage Accuracy		±5%			
	Other	Leakage Current	Rated input/output conditions	0.5mA / 0.75mA(max)		
Startup Time		100ms (typ)				
Switching Method, Operating Frequency		RCC topology, approx. 30kHz (under rated input/output conditions)				
Output Holdup Time		Rated input/output conditions	20ms (max)			
Additional Functions	Over Current Protection		Short-Circuit			
	Over Voltage Protection		5.8~6.8V	N/A	N/A	
	Remote Sensing		N/A			
	Remote On/Off Control		N/A			
	Thermal Protection		N/A			
	Parallel Operation		N/A			
	Protection Circuit Display		N/A			
	Display		N/A			
Environmental	Operating Temperature		0~+50°C			
	Storage Temperature		-25~+80°C			
	Operating Humidity		30~90% (No Condensation)			
	Storage Humidity					
vInsulation	Insulation Withstad Voltage	Input to Output	AC1500V for 1 minute			
		Input to Frame				
		Output to Frame	AC500V for 1 minute			
	Insulation Resistance	Input to Output	100MΩ (measured with 500V DC Megger)			
		Input to Frame				
		Output to Frame				
Structural Specifications	Vibration Resistance		10~55Hz 2.5G 1 hour (X, Y, and Z directions vibration time)			
	Cooling Requirements		Natural Convection			
	External Appearance (W x D x H) mm		179 x 100 x 37			
	Weight (g)		Approx. 550			
Applicable Standards	Conducted Emissions		FCC Part 15-J Class B (AC115V) VDE0871 Class B (AC230V)			
	Safety Standards		UL478 & 114 CSA Electrical Bulletin 1402C VDE (EN60950)			

			Rating	50 W (Single Output)			
Item			Conditions	SUM050-02	SUM050-03	SUM050-04	SUM050-05
Input	Rated Input Voltage		AC100-120V / 200-240V				
	Input Voltage Range		AC90~135V / 180~270V				
	Input Current	Rated input/output conditions	1.5A / 0.8A				
	Inrush Current		20A / 40A				
	Rated Frequency Range		50/60Hz (Frequency Range 45~65Hz)				
	Power Factor		N/A				
	Harmonic Attenuator		N/A				
	Efficiency(typ)	Rated input/output conditions	65%	70%	72%	78%	
Output	Rated Output Voltage		+5V	+12V	+15V	+24V	
	Adjustable Output Voltage Range		Fixed				
	Rated Output Current		10.0A	4.2.0A	3.4A	2.1A	
	Adjustable Output Current Range		0~10.A	0~4.2A	0~3.4A	0~2.1A	
	Maximum Output Power		50W				
	Ripple Noise(mVp-p)	Rated input/output condition	100	150	150	250	
	Constant Voltage Accuracy		±5%				
Other	Leakage Current	Rated input/output conditions	0.5mA / 0.75mA(max)				
	Startup Time		100ms (typ)				
	Switching Method, Operating Frequency		RCC topology, approx. 30kHz (under rated input/output conditions)				
	Output Holdup Time	Rated input/output conditions	20ms (max)				
Additional Functions	Over Current Protection		Detection above 120% of rated current				
	Over Voltage Protection		Detection above 115~135% of rated voltage				
	Remote Sensing		N/A				
	Remote On/Off Control		N/A				
	Thermal Protection		N/A				
	Parallel Operation		N/A				
	Protection Circuit Display		N/A				
	Display		N/A				
Environmental	Operating Temperature		0~+50°C				
	Storage Temperature		-25~+80°C				
	Operating Humidity		30~90% (No Condensation)				
	Storage Humidity						
vInsulation	Insulation Withstad Voltage		Input to Output	AC1500V for 1 minute			
			Input to Frame				
			Output to Frame				
	Insulation Resistance		AC500V for 1 minute				
			Input to Output	100MΩ (measured with 500V DC Megger)			
			Input to Frame				
		Output to Frame					
Structural Specifications	Vibration Resistance		10~55Hz 2.5G 1 hour (X, Y, and Z directions vibration time)				
	Cooling Requirements		Natural Convection				
	External Appearance (W x D x H) mm		179 x 100 x 37				
	Weight (g)		Approx. 550				
Applicable Standards	Conducted Emissions		FCC Part 15-J Class B (AC115V) VDE0871 Class B (AC230V)				
	Safety Standards		UL478 & 114 CSA Electrical Bulletin 1402C VDE (EN60950)				

			Rating	50 W (2 Channels)	
Item			Conditions	SUM050-06	
Input	Rated Input Voltage		AC100-120V / 200-240V		
	Input Voltage Range		AC90~135V / 180~270V		
	Input Current	Rated input/output conditions		1.5A / 0.8A	
	Inrush Current		20A / 40A		
	Rated Frequency Range		50/60Hz (Frequency Range 45~65Hz)		
	Power Factor		N/A		
	Harmonic Attenuator		N/A		
	Efficiency(typ)	Rated input/output conditions		73%	
Output	Rated Output Voltage		+5V	+24V	
	Adjustable Output Voltage Range		Fixed		
	Rated Output Current		2.0A		
	Adjustable Output Current Range		0.2~2.0A		
	Maximum Output Power		58W		
	Ripple Noise(mVp-p)	Rated input/output condition		100	200
	Constant Voltage Accuracy		±5%		
	Other	Leakage Current	Rated input/output conditions		0.5mA / 0.75mA(max)
Startup Time		100ms (typ)			
Switching Method, Operating Frequency		RCC topology, approx. 30kHz (under rated input/output conditions)			
Output Holdup Time		Rated input/output conditions		20ms (max)	
Additional Functions	Over Current Protection		Short-Circuit		
	Over Voltage Protection		5.8~6.8V	N/A	
	Remote Sensing		N/A		
	Remote On/Off Control		N/A		
	Thermal Protection		N/A		
	Parallel Operation		N/A		
	Protection Circuit Display		N/A		
	Display		N/A		
Environmental	Operating Temperature		0~+50°C		
	Storage Temperature		-25~+80°C		
	Operating Humidity		30~90% (No Condensation)		
	Storage Humidity				
vInsulation	Insulation Withstad Voltage	Input to Output	AC1500V for 1 minute		
		Input to Frame			
		Output to Frame			
	Insulation Resistance	Input to Output	100MΩ (measured with 500V DC Megger)		
		Input to Frame			
		Output to Frame			
Structural Specifications	Vibration Resistance		10~55Hz 2.5G 1 hour (X, Y, and Z directions vibration time)		
	Cooling Requirements		Natural Convection		
	External Appearance (W x D x H) mm		179 x 100 x 37		
	Weight (g)		Approx. 550		
Applicable Standards	Conducted Emissions		FCC Part 15-J Class B (AC115V) VDE0871 Class B (AC230V)		
	Safety Standards		UL1950D3 CSA Electrical Bulletin 1402C VDE (EN60950)		

			Rating	100 W (Single Output)			
				SUM100-02	SUM100-03	SUM100-04	SUM-100-05
Item			Conditions				
Input	Rated Input Voltage		AC100-120V / 200-240V				
	Input Voltage Range		AC90~135V / 180~270V				
	Input Current	Rated input/output conditions		2.5A / 1.3A			
	Inrush Current		20A / 40A				
	Rated Frequency Range		50/60Hz (Frequency Range 45~65Hz)				
	Power Factor		N/A				
	Harmonic Attenuator		N/A				
	Efficiency(typ)	Rated input/output conditions		80%	84%	84%	85%
Output	Rated Output Voltage		+5V	+12V	+15V	+24V	
	Adjustable Output Voltage Range		±10%				
	Rated Output Current		20A	8.5A	7A	4.5A	
	Adjustable Output Current Range		0~20A	0~8.5A	0~7A	0~4.5A	
	Maximum Output Power		100W				
	Ripple Noise(mVp-p)	Rated input/output condition		150	220	250	340
	Constant Voltage Accuracy		±3%				
Other	Leakage Current	Rated input/output conditions		0.5mA / 0.75mA(max)			
	Startup Time		150ms (typ)				
	Switching Method, Operating Frequency		RCC topology, approx. 100kHz (under rated input/output conditions)				
	Output Holdup Time	Rated input/output conditions		20ms (max)			
Additional Functions	Over Current Protection		Detection above 120% of rated current				
	Over Voltage Protection		Detection 115~135% of rated voltage				
	Remote Sensing		N/A				
	Remote On/Off Control		N/A				
	Thermal Protection		N/A				
	Parallel Operation		N/A				
	Protection Circuit Display		N/A				
	Display		N/A				
Environmental	Operating Temperature		0~+50°C				
	Storage Temperature		-25~+80°C				
	Operating Humidity		30~90% (No Condensation)				
	Storage Humidity						
Insulation	Insulation Withstad Voltage	Input to Output	AC1500V for 1 minute				
		Input to Frame					
		Output to Frame	AC500V for 1 minute				
	Insulation Resistance	Input to Output	100MΩ (measured with 500V DC Megger)				
		Input to Frame					
		Output to Frame					
Structural Specifications	Vibration Resistance		10~55Hz 2G 1 hour (X, Y, and Z directions vibration time)				
	Cooling Requirements		Natural Convection				
	External Appearance (W x D x H) mm		165 x 110 x 48				
	Weight (g)		Approx. 670				
Applicable Standards	Conducted Emissions		FCC Part 15-J Class B (AC100-120V) VDE0871 Class B (AC200-240V)				
	Safety Standards		UL1950 CSA Electrical Bulletin 1402C VDE (EN60950)				

			Rating	120 W (2 Channels)	
				SUM100-06A	
Item			Conditions		
Input	Rated Input Voltage		AC115V / 230V		
	Input Voltage Range		AC90~135V / 180~270V		
	Input Current	Rated input/output conditions		2.5A / 1.5A	
	Inrush Current		20A / 40A		
	Rated Frequency Range		50/60Hz (Frequency Range 47~440Hz)		
	Power Factor		N/A		
	Harmonic Attenuator		N/A		
	Efficiency(typ)	Rated input/output conditions		75%	
Output	Rated Output Voltage		+5V	+24V	
	Adjustable Output Voltage Range		Fixed		
	Rated Output Current		5A	4A	
	Adjustable Output Current Range		1~5A	0.5~6A	
	Maximum Output Power		25W	96W	
	Ripple Noise(mVp-p)	Rated input/output condition		120	240
	Constant Voltage Accuracy		±5%		
Other	Leakage Current	Rated input/output conditions		0.5mA / 0.75mA(max)	
	Startup Time		150ms (typ)		
	Switching Method, Operating Frequency		RCC topology, approx. 100kHz (under rated input/output conditions)		
	Output Holdup Time	Rated input/output conditions		20ms (max)	
Additional Functions	Over Current Protection		Short-Circuit		
	Over Voltage Protection		Detection 115~140% of rated voltage	N/A	
	Remote Sensing		N/A		
	Remote On/Off Control		N/A		
	Thermal Protection		N/A		
	Parallel Operation		N/A		
	Protection Circuit Display		N/A		
	Display		N/A		
Environmental	Operating Temperature		0~+50℃		
	Storage Temperature		-25~+80℃		
	Operating Humidity		30~90% (No Condensation)		
	Storage Humidity				
vInsulation	Insulation Withstad Voltage	Input to Output	AC1500V for 1 minute		
		Input to Frame			
		Output to Frame			
	Insulation Resistance	Input to Output	100MΩ (measured with 500V DC Megger)		
		Input to Frame			
Output to Frame					
Structural Specifications	Vibration Resistance		10~55Hz 2G 1 hour (X, Y, and Z directions vibration time)		
	Cooling Requirements		Natural Convection		
	External Appearance (W x D x H) mm		170 x 119.50 x 45		
	Weight (g)		Approx. 800		
Applicable Standards	Conducted Emissions		FCC Class B VDE0871 Class B		
	Safety Standards		UL478 CSA Electrical Bulletin 1402C VDE (EN60950)		