

## **SPECIFICATIONS**

## Programmable DC Power Supply

MODEL: OPE-2005S



Output WATT         0 to 200V / 0 to 5A           Output WATT         1 KW           Forgramming Accuracy         Voltage         0.2% + 900mV           (6250 ±50)±(%of output + offset)         Current         0.2% + 25mA           Radoback Accuracy         Voltage         0.2% + 900mV           (6250 ±50)±(%of output + offset)         Current         0.2% + 25mA           Ripple and Noise(20Hz to 20MHz)         Voltage         0.01% + 150mV           Coarent         0.01% + 150mV         0.01% + 150mV           Load Regulation         Voltage         0.01% + 150mV           (@250 ±50)±(%of output + offset)         Current         0.01% + 150mV           Line Regulation         Voltage         0.01% + 150mV           (@250 ±50)±(%of output + offset)         Current         0.01% + 15mA           Line Regulation         Voltage         0.01% + 15mA           Resolution         Programming/Readback         270mV / ≤ 15mA           Alter a 30-minute warm-up         Display Meter         10/5-00MD           Voltage         0.1% + 20mV           After a 1 bour warm-up         Current         0.05% + 3mA           Voltage Programming Speed         Rail food         Rail food           (10% ~ 00%)         Rail food         Rai	Parameter			Specifications			
Programming Accuracy   Moltage	Output rating(@0℃ ~ 40℃)			0 to 200V / 0 to 5A			
Current	Output WATT			1 KW			
Readback Accuracy   Voltage   0.2% + 900mV	Programming Accuracy	Voltage		0.2% + 900mV			
Current	(@25℃ ±5℃)±(%of output + offset)	Current					
No load   Power Switch ON/OFF   Voltage Output A plane   Voltage Output Stelling Imme   Vo	Readback Accuracy	Voltage					
Current	(@25℃ ±5℃)±(%of output + offset)	Current		0.2% + 25mA			
Current							
Colar Regulation   Color	Ripple and Noise(20Hz to 20MHz)						
Courent   Cou	Load Regulation						
Voltage							
Current   Course   Current   Current   Current   Current   Current   Current   Conficient   Course   Current   Course   Current   Cur	Line Regulation						
Programming/Readback   S 70mV	_						
Display Meter   Display Met	(CEE O EO O) E(NOT Output + Offset)						
Temperature Coefficient ±(%of output + offset)	Resolution			· ·			
After a 30-minute warm-up  Stability ±(%of output + offset) After a 1 hour warm-up  Current  O.1% + 20mV  After a 1 hour warm-up  Current  O.2% + 5mA  Less than 50/m for output to recover to within 50mV following a change in output currorm full load to half load or vice versa  Voltage Programming Speed (10% ~ 90%)  Power Switch ON/OFF Voltage Output Voltage Overshoot & Undershoot  Remote Interface  Programming Language  Programming Language  Command Processing Average Time (@19200bps)  Output Setting  Measurement The Other  Setting & Query  Se	Temperature Coefficient +(%of output + offset)						
Stability ± (% of output + offset)   After a 1 hour warm-up   Current   C							
After a 1 hour warm-up  Current  O.2% + 5mA  Less than 50/ss for output to recover to within 50mV following a change in output current from full load to half load or vice versa  Voltage Programming Speed (10% ~ 90%)  Power Switch ON/OFF Voltage Overshoot & Undershoot  Remote Interface  Power Switch ON/OFF Voltage Output Setting Programming Language  Command Processing Average Time (@19200bps)  Output Setting Output Setting Output Setting Output Setting Output Setting Voltage & Current Query Voltage & Current Query Ottage & Current Query Ottage & Current Query Ottage & Current Query Ottage & Current Storage Memory  Operation Temperature Range  Output Terminal Isolated (maximum, from chassis ground)  Standard Output Setting Output Setting Output Setting Output Setting & Output Setting Source for full rated output. At higher temperatures the output current is derated in 50% at 55°C maximum temperature  Standard Output Terminal Isolated (maximum, from chassis ground)  Standard Output Setting Output Setting Output Setting Source for full rated output. At higher temperatures the output current is derated in 50% at 55°C maximum temperature  Standard Output to the five sense and the (-)output and the (-)sense terminals  Standard Output Setting Source for Source fo	· · · · · · · · · · · · · · · · · · ·						
Transient Response Time  Less than 50 //s for output to recover to within 50 mV following a change in output cur from full load to half load or vice versa  No load   Rising time   ≤ 120 ms							
From full load to half load or vice versa	Arter a i flour warm-up	Current					
Voltage Programming Speed (10% ~ 90%)  Half load (10% ~ 90%)  Palling time Falling time S3.6s  Falling time Falling time Falling time Falling time Falling time S3.6s  Falling time Falling time Falling time Falling time Falling time Falling time S3.6s  Falling time Falling time Falling time Falling time Falling time S1.5nms  ScPI(Standard Commands for Programmable Instruments)  Voltage & Current Setting Voltage & Current Query 12ms  Voltage & Current Setting 10ms  Voltage & Current Setting	Transient Response Time						
Voltage Programming Speed (10% ~ 90%)  Half load   Rising time   ≤3.6s     Ralling time   ≤15ms     Falling time   ≤15ms     Power Switch ON/OFF   No overshoot, undershoot : ≤0V ~ ≥ −0.3V     Voltage Overshoot & Undershoot     Remote Interface   Programming Language     Programming Language   Programming Language     Programming Language   Programming Language     Command Processing Average Time (@19200bps)     Measurement   Voltage & Current Setting   10ms     Voltage & Current Query   12ms     Voltage & Current Query   15ms     Retire & Query   32ms     State Storage Memory     Programming Language   Programmable Instruments     Voltage & Current Query   15ms     Setting & Query   32ms     State Storage Memory     Programming Language   Programmable Instruments     Voltage & Current Query   15ms     Setting & Query   32ms     State Storage Memory   Programmable (voltage, current) stored states     Programming Language   Programmable (voltage, current) stored states     Programming Language   Programmable Instruments     Programming Language   Programmable Instruments     Voltage & Current Query   15ms     Setting & Query   32ms     State Storage Memory   Programmable (voltage, current) stored states     Programming Language   Programmable Instruments     Programming Language   Programmable Instruments     Programming Language   Programmable Instruments     Voltage & Current Setting   10ms     Voltage & Current Query   12ms     Stampage   Programmable Instruments     Programming Language   Programmable Instruments     Programming Language   Programmable Instruments     Voltage & Current Setting   10ms     Voltage & Current Query   12ms     Programming Language   Programmable Instruments     Programming		No load	Rising time	≤ 120ms			
Half load Falling time	Voltage Programming Speed	No load	Falling time	≤3.6s			
Falling time   ≤ 15ms     Output Voltage Overshoot & Undershoot   Power Switch ON/OFF   No overshoot, undershoot : ≤0V ~ ≥ −0.3V     Voltage Output Setting   No overshoot, No undershoot     Remote Interface   RS232C Standard (RS485 Option)     Programming Language   SCPI(Standard Commands for Programmable Instruments)     Output Setting   Voltage & Current Setting   10ms     Voltage & Current Query   12ms     Voltage & Current Query   15ms     Measurement   Voltage & Current Query   32ms     State Storage Memory   Five user-configurable(voltage, current)stored states     Operation Temperature Range   Standard   Standard     Output Terminal Isolated (maximum, from chassis ground)   Standard     AC Input Ratings   Option   Output Setting   Standard     Option   Standard   Standard   Standard   Standard     Option   Standard   Standard   Standard   Standard   Standard     Option   Standard		Light look	Rising time	≤ 120ms			
Output Voltage Overshoot & Undershoot  Remote Interface Programming Language SCPI(Standard Commands for Programmable Instruments)  Command Processing Average Time (@19200bps)  Measurement The Other Setting & Query Operation Temperature Range  Output Terminal Isolated (maximum, from chassis ground)  Voltage Output Setting No overshoot, No undershoot RS232C Standard (RS485 Option) SCPI(Standard Commands for Programmable Instruments) Voltage & Current Setting Voltage & Current Query 12ms Voltage & Current Query 15ms Setting & Query 32ms State Storage Memory Five user-configurable(voltage,current)stored states  Or ~ 40°C for full rated output. At higher temperatures the output current is derated in to 50% at 55°C maximum temperature  Cooling Usolation AC FAN  1500 output is ±60 Vdc when connecting shorting conductors without insulation to to the (+) output to the (+) sense and the (-) output and the (-) sense terminals  AC Input Ratings  Option  Voltage Output Setting Voltage & Current Query 12ms Voltage & Current Query 12ms Voltage & Current Query 15ms Toms 15ms The Other Setting & Query 32ms Standard Voltage & Current Query 15ms Toms Toms 15ms The Other Setting & Query 32ms Standard output. At higher temperatures the output current is derated in the following of the following output is the following output is the following output is the following output and the (-) sense terminals  Standard 220V ± 10% 50~60Hz  Option		Hall load	Falling time	≤ 15ms			
Voltage Output Setting   No overshoot, No undershoot	Output Valtaga Ouarahaat 8 Hadayahaat	Power Switch ON/OFF		No overshoot, undershoot : $\leq$ 0V $\sim$ $\geq$ -0.3V			
Programming Language  Command Processing Average Time (@19200bps)  Measurement The Other  Setting & Query  Ovoltage & Current Query  Voltage & Current Query  12ms  Voltage & Current Query  15ms  State Storage Memory  Setting & Query  Operation Temperature Range  Cooling  Output Terminal Isolated (maximum, from chassis ground)  Standard  Option  SCPI(Standard Commands for Programmable Instruments)  Voltage & Current Query  12ms  Voltage & Current Query  15ms  Stems  Or ~ 40°C for full rated output. At higher temperatures the output current is derated in to 50% at 55°C maximum temperature  Standard  220V ± 10% 50~60Hz  Option	Volume oversitoot & Offdersitoot		tput Setting	No overshoot, No undershoot			
Command Processing Average Time (@19200bps)  Measurement The Other  Setting & Query  Setting & Query  Five user-configurable(voltage, current) stored states  Operation Temperature Range  Cooling  Output Terminal Isolated (maximum, from chassis ground)  Standard  Standard  Voltage & Current Query  15ms  Five user-configurable(voltage, current) stored states  O"C" ~ 40"C" for full rated output. At higher temperatures the output current is derated in to 50% at 55"C maximum temperature  Lagovariant Setting 10ms  Voltage & Current Setting 12ms  Isolated Query  32ms  Five user-configurable(voltage, current) stored states  O"C" ~ 40"C" for full rated output. At higher temperatures the output current is derated in the following temperature  Cooling  Isolation AC FAN  Lagovariant Setting 12ms  Setting & Query  32ms  Five user-configurable(voltage, current) stored states  O"C" ~ 40"C" for full rated output. At higher temperatures the output current is derated in the following temperature  Lagovariant Setting 20ms  Setting & Query  Settin	Remote Interface			RS232C Standard (RS485 Option)			
Command Processing Average Time (@19200bps)  Measurement The Other  Setting & Query  Setting & Query  Setting & Query  The Other  Setting & Query  The Other  Setting & Query  Setting & Query  The Other  Setting & Query  The Other  Setting & Query  Setting & Query  The Other  The Other  Setting & Query  The Other  The Other  Setting & Query  The Other  Setting & Query  The Other  Setting & Query  The Other  The Other  The Other  Setting & Query  The Other  The Other  Setting & Query  The Other  The Other  The Other  The Other  Setting & Query  The Other	Programming Language			SCPI(Standard Commands for Programmable Instruments)			
Command Processing Average Time (@19200bps)  Measurement The Other  Setting & Query  Setting & Query  Setting & Query  Tive user-configurable(voltage,current)stored states  Operation Temperature Range  Cooling  Output Terminal Isolated (maximum, from chassis ground)  Standard  Standard  Option  Voltage & Current Query  Setting & Query  32ms  Five user-configurable(voltage,current)stored states  O"C ~ 40"C for full rated output. At higher temperatures the output current is derated to 50% at 55"C maximum temperature  Lisolation AC FAN  ### 30V output is ±60 Vdc when connecting shorting conductors without insulation to to the (+)output to the (+)sense and the (-)output and the (-)sense terminals  AC Input Ratings  Option  Option  Option  Option  Option  Option  Option  Option	Command Processing Average Time			Voltage & Current Setting	10ms		
(@19200bps)     Measurement The Other     Voltage & Current Query     15ms       State Storage Memory     32ms       State Storage Memory     Five user-configurable(voltage, current) stored states       Operation Temperature Range     0°C ~ 40°C for full rated output. At higher temperatures the output current is derated I to 50% at 55°C maximum temperature       Cooling     Isolation AC FAN       Output Terminal Isolated (maximum, from chassis ground)     ±30V output is ±60 Vdc when connecting shorting conductors without insulation to t (+)output to the (+)sense and the (-)output and the (-)sense terminals       AC Input Ratings     Standard     220V ± 10% 50~60Hz       40°C ~ 40°C for full rated output. At higher temperatures the output current is derated I to 50% at 55°C maximum temperature				Voltage & Current Query	12ms		
State Storage Memory  Five user-configurable(voltage, current) stored states  0° ~ 40° for full rated output. At higher temperatures the output current is derated in to 50% at 55° maximum temperature  Cooling  Isolation AC FAN  Output Terminal Isolated (maximum, from chassis ground)  Standard  AC Input Ratings  Five user-configurable(voltage, current) stored states  0° ~ 40° for full rated output. At higher temperatures the output current is derated in to 50% at 55° maximum temperature  Isolation AC FAN  ±30V output is ±60 Vdc when connecting shorting conductors without insulation to the (+) output to the (+) sense and the (-) output and the (-) sense terminals  AC Input Ratings  Option  Five user-configurable(voltage, current) stored states  0° ~ 40° for full rated output. At higher temperatures the output current is derated in the sense of the sense				Voltage & Current Query	15ms		
Operation Temperature Range  O°C ~ 40°C for full rated output. At higher temperatures the output current is derated to 50% at 55°C maximum temperature  Isolation AC FAN  Output Terminal Isolated (maximum, from chassis ground)  Standard  AC Input Ratings  Option  O°C ~ 40°C for full rated output. At higher temperatures the output current is derated I to 50% at 55°C maximum temperature  Isolation AC FAN  ±30V output is ±60 Vdc when connecting shorting conductors without insulation to to (+)output to the (+)sense and the (-)output and the (-)sense terminals  AC Input Ratings		The Other		Setting & Query	32ms		
Operation Temperature Range  O°C ~ 40°C for full rated output. At higher temperatures the output current is derated to 50% at 55°C maximum temperature  Isolation AC FAN  Output Terminal Isolated (maximum, from chassis ground)  Standard  AC Input Ratings  Option  O°C ~ 40°C for full rated output. At higher temperatures the output current is derated I to 50% at 55°C maximum temperature  Isolation AC FAN  ±30V output is ±60 Vdc when connecting shorting conductors without insulation to to (+)output to the (+)sense and the (-)output and the (-)sense terminals  AC Input Ratings				Five user-configurable(voltage,current)stored states			
Cooling  Isolation AC FAN  Output Terminal Isolated (maximum, from chassis ground)  Standard  AC Input Ratings  Isolation AC FAN  ### Standard    Standard				$0^{\circ}\mathrm{C}\sim40^{\circ}\mathrm{C}$ for full rated output. At higher temperatures the output current is derated linearly			
Output Terminal Isolated (maximum, from chassis ground)  ±30V output is ±60 Vdc when connecting shorting conductors without insulation to t (+)output to the (+)sense and the (-)output and the (-)sense terminals  Standard  220V ± 10% 50~60Hz  AC Input Ratings	Cooling			·			
Output Terminal Isolated (maximum, from chassis ground)  (+)output to the (+)sense and the (-)output and the (-)sense terminals    Standard   220V ± 10%   50~60Hz     AC Input Ratings   100V ± 10%   50~60Hz     Option   100V ± 10%   50~60Hz     Option   100V ± 10%   100V ± 10%   100V ± 10%   100V ± 10%     Option   100V ± 10%     Opti							
AC Input Ratings 100V ± 10% 50~60Hz	Output Terminal Isolated (maximum, from chass	is ground)		(+)output to the (+)sense and the (-)output and the (-)sense terminals			
Option	AC Input Ratings	Standard					
230V ± 10% 50~60Hz							
				230V ± 10% 50~60Hz			
Calibration Interval Recommended 1 year	Calibration Interval						
Dimensions Standard 426mm(W) * 177mm(H) * 505mm(D) 19-inch 4U Standard Size	Dimensions	Standard			426mm(W) * 177mm(H) * 505mm(D) 19-inch 4U Standard Size		
Maximum Input Power(full load) 2.61KW	Maximum Input Power(full load)			2.61KW			
Net weight 31 kg	Weight	Net weight		31kg			
Weight Gross weight 32.5kg	ivveigiit	Gross weight		32.5kg			