

PS 9000 3U / 2U (from 2014) register list for KE firmware from V2.01 (the currently installed version can be checked in Menu in "Info HW, SW...")

Modbus address	Read coils (0x01)	Read holding registers (0x03)	Write single coil (0x05)	Write single register (0x06)	Write multiple registers (0x10)	Description	Access	Access condition for writing	Data type	Data length in bytes	Number of registers	Data	Example
0	x					Device class	R		uint(16)	2	1		28 = PS 9000 series
1	x					Device type	R		char	40	20		PS 9080-170 3U
21	x					Manufacturer	R		char	40	20		
41	x					Manufacturer address	R		char	40	20		
61	x					Manufacturer ZIP code	R		char	40	20		
81	x					Manufacturer phone number	R		char	40	20		
101	x					Manufacturer website	R		char	40	20		
121	x					Nominal voltage	R		float	4	2	Floating point number IEEE754	80
123	x					Nominal current	R		float	4	2	Floating point number IEEE754	170
125	x					Nominal power	R		float	4	2	Floating point number IEEE754	5000
127	x					Max. Internal resistance	R		float	4	2	Floating point number IEEE754	14
129	x					Min. Internal resistance	R		float	4	2	Floating point number IEEE754	Always 0
131	x					Article no.	R		char	40	20		06230350
151	x					Serial no.	R		char	40	20		100010002
171	x				x	User text	RW	REM	char	40	20		
191	x					Firmware version (KE)	R		char	40	20		V2.01 29.01.2014
211	x					Firmware version (HMI)	R		char	40	20		V2.01 29.01.2014
231	x					Firmware version (DR)	R		char	40	20		V1.10.16

402	x		x			Remote mode	RW		uint(16)	2	1	Coils : Remote	0x0000 = off; 0xFF00 = on
405	x		x			Standby on/off (input or output)	RW	REM	uint(16)	2	1	Coils : Output	0x0000 = on; 0xFF00 = off
408		x		x		Condition of output/input after powering the device	RW	REM	uint(16)	2	1	Reg : Power-On	0xFFFF = off; 0xFFFE = restore
409	x		x			Operation mode (UIP/UIR)	RW	REM	uint(16)	2	1	Coils : Operation mode	0x0000 = UIP; 0xFF00 = UIR
410			x			Restart of the device (warm start)	W	REM	uint(16)	2	1	Coils : Restart	0xFF00 = execute
411			x			Acknowledge alarms	W	REM	uint(16)	2	1	Coils : Alarms	0xFF00 = acknowledge
416	x		x			Reference voltage of analog interface (Vref)	RW	REM	uint(16)	2	1	Reg : Vref	0x0000 = 10V; 0xFF00 = 5V
500		x		x		Set voltage value	RW	REM	uint(16)	2	1	0x0000 - 0xCCCC (0 - 100%)	Voltage value (for translation see programming guide)
501		x		x		Set current value	RW	REM	uint(16)	2	1	0x0000 - 0xCCCC (0 - 100%)	Current value (for translation see programming guide)
502		x		x		Set power value	RW	REM	uint(16)	2	1	0x0000 - 0xCCCC (0 - 100%)	Power value (for translation see programming guide)
505		x				Device state	R		uint(32)	4	2	Bit 0- 4: Control location	0x00 = free; 0x01 = local; 0x02 = remote; 0x03 = USB; 0x04 = analog; 0x06 = Ethernet
												Bit 5 : -	
												Bit 6 : -	
												Bit 7 : DC output	0 = off; 1 = on
												Bit 8 : -	
												Bit 10-9: Regulation mode	00 = CV; 01 = CR; 10 = CC; 11 = CP
												Bit 11 : Remote	0 = off; 1 = on
												Bit 12 : -	
												Bit 13 : -	
												Bit 14 : External sense	0 = off; 1 = on
												Bit 15 : Alarms	0 = no alarm active; 1 = at least one alarm active
												Bit 16 : Alarm OVP	0 = none; 1 = active
												Bit 17 : Alarm OCP	0 = none; 1 = active
												Bit 18 : Alarm OPP	0 = none; 1 = active
												Bit 19 : Alarm OT	0 = none; 1 = active
												Bit 20 : -	
												Bit 21 : Alarm PF1	0 = none; 1 = active
												Bit 22 : Alarm PF2	0 = none; 1 = active
												Bit 23 : Alarm PF3	0 = none; 1 = active
507		x				Actual voltage	R		uint(16)	2	1	0x0000 - 0xFFFF (0 - 125%)	Actual voltage (for translation see programming guide)
508		x				Actual current	R		uint(16)	2	1	0x0000 - 0xFFFF (0 - 125%)	Actual current (for translation see programming guide)
509		x				Actual power	R		uint(16)	2	1	0x0000 - 0xFFFF (0 - 125%)	Actual power (for translation see programming guide)

550		x		x		Overvoltage protection threshold (OVP)	RW	REM	uint(16)	2	1	0x0000 - 0xE147 (0 - 110%)	OVP threshold (for translation see programming guide)
553		x		x		Overcurrent protection threshold (OCP)	RW	REM	uint(16)	2	1	0x0000 - 0xE147 (0 - 110%)	OCP threshold (for translation see programming guide)
556		x		x		Overpower protection threshold (OPP)	RW	REM	uint(16)	2	1	0x0000 - 0xE147 (0 - 110%)	OPP threshold (for translation see programming guide)

9000		x		x		Upper limit of voltage set value (U-max)	RW	REM	uint(16)	2	1	0x0000 - 0xCCCC (0 - 100%)	Voltage value (for translation see programming guide)
9001		x		x		Lower limit of voltage set value (U-min)	RW	REM	uint(16)	2	1	0x0000 - 0xCCCC (0 - 100%)	Voltage value (for translation see programming guide)
9002		x		x		Upper limit of current set value (I-max)	RW	REM	uint(16)	2	1	0x0000 - 0xCCCC (0 - 100%)	Current value (for translation see programming guide)
9003		x		x		Lower limit of current set value (I-min)	RW	REM	uint(16)	2	1	0x0000 - 0xCCCC (0 - 100%)	Current value (for translation see programming guide)
9004		x		x		Upper limit of power set value (P-max)	RW	REM	uint(16)	2	1	0x0000 - 0xCCCC (0 - 100%)	Power value (for translation see programming guide)

10008	x		x			Ethernet: DHCP	RW	REM	uint(16)	2	1	Coils: DHCP on/off	0x0000 = off; 0xFF00 = on
10017		x				Ethernet: DHCP status	R		uint(16)	2	1	Bit0: DHCP running	0 = manual; 1= DHCP
10502		x		x		Ethernet: IP address	RW	REM	uint(8)	4	2	Byte 0 - 3: 0..255	192.168.0.2 (default)
10504		x		x		Ethernet: Subnet mask	RW	REM	uint(8)	4	2	Byte 0 - 3: 0..255	255.255.255.0 (default)
10506		x				Ethernet: Gateway	RW	REM	uint(8)	4	2	Byte 0 - 3: 0..255	192.168.0.1 (default)
10508		x		x		Ethernet: Host name	RW	REM	char	54	27		"Client" (default)
10535		x		x		Ethernet: Domain name	RW	REM	char	54	27		"Workgroup" (default)
10562		x			x	Ethernet: DNS	RW	REM	uint(8)	4	2	Byte 0 - 3: 0..255	0.0.0.0 (default)
10567		x				Ethernet: MAC	R		uint(8)	6	3	Byte 0 - 5: 0..255	00:50:C2:C3:12:34 or 00-50-C2-C3-12-34
10572		x		x		Ethernet: Port	RW	REM	uint(16)	2	1	0..65536 (except 80)	5025 (default)