

PSI 9000 2U/3U/15U/24U register list for devices with KE firmware from V2.19 (Anybus) or V2.05 (GPIB) (check the installed version in your device's MENU in item INFO HW, SW)															Profibus subslot	Profibus/Profinet index in slot	EtherCAT SDO/ PDO?
Modbus address	Read coils (0x01)	Read holding registers (0x03)	Write single coil (0x05)	Write single register (0x06)	Write multiple registers (0x0F)	Description	Access	Data type	Data length in bytes	Number of registers	Data	Example					
0						Device class	R	uint16	2	1		21, 33, 35, 37 = PSI9000 Series		1	0		
1	x					Device type	R	char	40	20	ASCII	PSI9000-170		1	1		
21	x					Manufacturer	R	char	40	20	ASCII			1	2		
41	x					Manufacturer address	R	char	40	20	ASCII			1	3		
61	x					Manufacturer ZP code	R	char	40	20	ASCII			1	4		
81	x					Manufacturer phone number	R	char	40	20	ASCII			1	5		
101	x					Manufacturer website	R	char	40	20	ASCII			1	6		
121	x					Nominal voltage	R	float	4	2	Floating point number IEEE754	80		1	7		
123	x					Nominal current	R	float	4	2	Floating point number IEEE754	170		1	8		
125	x					Nominal power	R	float	4	2	Floating point number IEEE754	3500		1	9		
127	x					Max. internal resistance	R	float	4	2	Floating point number IEEE754	12		1	10		
129	x					Min. internal resistance	R	float	4	2	Floating point number IEEE754	0		1	11		
131	x					Article no.	R	char	40	20	ASCII	33230401		1	12		
151	x					Serial no.	R	char	40	20	ASCII	100010002		1	13		
171	x		x			User text	RW	char	40	20	ASCII			1	14		
191	x					Firmware version (KE)	R	char	40	20	ASCII	V2.01 05.09.2012		1	15		
211	x					Firmware version (HMI)	R	char	40	20	ASCII	V2.02 13.08.2012		1	16		
231	x					Firmware version (DR)	R	char	40	20	ASCII	V2.01 10.09.2012		1	17		
402	x		x			Remote mode	RW	uint16	2	1	Coils : Remote	0x0000 = off; 0xFF00 = on		2	1		
405	x					DC output	RW	uint16	2	1	Coils : Output	0x0000 = off; 0xFF00 = on		2	4		
407	x		x			Condition of DC output after power fail alarm	RW	uint16	2	1	Coils : Auto-On	0x0000 = off; 0xFF00 = auto-on		3	30		
408	x		x		x	Condition of DC output after powering the device	RW	uint16	2	1	Reg : Power-On	0xFFFF = off; 0xFFFE = restore		2	6		
409	x					Operation mode (UPI/UR)	RW	uint16	2	1	Coils : Operation mode	0x0000 = UPI; 0xFF00 = UR		2	7		
410			x			Restart of the device (warm start)	W	uint16	2	1	Coils : Restart	0xFF00 = execute		2	8		
411						Acknowledge alarms	W	uint16	2	1	Coils : Alarms	0xFF00 = acknowledge		2	9		
416	x		x			Analog interface: Reference voltage (pin VREF)	RW	uint16	2	1	Coils : VREF	0x0000 = 10V; 0xFF00 = 5V		2	14		
417	x					Analog interface: REM-SB level	RW	uint16	2	1	Coils : REM-SB Level	0x0000 = normal; 0xFF00 = inverted		2	36		
418	x					Analog interface: REM-SB action	W	uint16	2	1	Coils : REM-SB Action	0x0000 = DC; off; 0xFF00 = DC auto		2	37		
425	x		x			DC output/input after leaving remote	RW	uint16	2	1	Coils : Condition	0x0000 = off; 0xFF00 = unchanged					
426	x		x			Function generator XY: Select PV mode	RW	uint16	2	1	Coils : PV mode	0x0000 = off; 0xFF00 = on		5	13		
500	x		x			Set voltage value	RW	uint16	2	1	0x0000 - 0xD0E5 (0 - 102%)	Voltage value (for translation see programming guide)		2	23		
501	x		x			Set current value or irradiation (PV function)	RW	uint16	2	1	0x0000 - 0xD0E5 (0 - 102%)	Current value (for translation see programming guide) / Irradiation		2	24		
502	x		x			Set power value	RW	uint16	2	1	0x0000 - 0xD0E5 (0 - 102%)	Power value (for translation see programming guide)		2	25		
503	x		x			Set resistance value	RW	uint16	2	1	0x0000 - 0xC0CC (0 - 100%)	Resistance value (for translation see programming guide)		2	26		
505	x					Device state	R	uint32	4	2	Bit 0-4: Control location  Bit 5 : Config mode Bit 6 : Master-slave type Bit 7 : Output state Bit 9-10 : Regulation mode Bit 13 : Function generator Bit 14 : External sense Bit 15 : Alarm Bit 16 : OVP Bit 17 : OCP Bit 18 : OPP Bit 19 : OT Bit 20 : OTpre Bit 21 : Power fail 1 Bit 22 : Power fail 2 Bit 23 : Power fail 3 Bit 24 : UVd Bit 25 : OVD Bit 26 : UCD Bit 27 : OCD Bit 28 : OPD Bit 29 : MSS Bit 30 : REM-SB  0x00 = free; 0x01 = local; 0x03 = USB; 0x04 = analog; 0x05 = Profibus; 0x06 = Ethernet; 0x08 = Master/Slave; 0x09 = RS232; 0x10 = CANopen; 0x12 = Modbus TCP/IP; 0x13 = Profinet IP; 0x14 = Ethernet IP; 0x15 = Ethernet 2P; 0x16 = Modbus TCP 2P; 0x17 = Profinet 2P; 0x18 = GPiB; 0x19 = CAN; 0x1A = EtherCAT			2	27		
507	x					Actual voltage	R	uint16	2	1	0x0000 - 0xFFFF (0 - 125%)	Actual voltage (for translation see programming guide)		2	28		
508	x					Actual current	R	uint16	2	1	0x0000 - 0xFFFF (0 - 125%)	Actual current (for translation see programming guide)		2	29		
509	x					Actual power	R	uint16	2	1	0x0000 - 0xFFFF (0 - 125%)	Actual power (for translation see programming guide)		2	30		
520	x					Count of OV alarms since power up	R	uint16	2	1	0x0000 - 0xFFFF	Count		3	20		
521	x					Count of OC alarms since power up	R	uint16	2	1	0x0000 - 0xFFFF	Count		3	21		
522	x					Count of OP alarms since power up	R	uint16	2	1	0x0000 - 0xFFFF	Count		3	22		
523	x					Count of OT alarms since power up	R	uint16	2	1	0x0000 - 0xFFFF	Count		3	23		
524	x					Count of PF alarms since power up	R	uint16	2	1	0x0000 - 0xFFFF	Count		3	24		
550	x		x			Overvoltage protection threshold (OVP)	RW	uint16	2	1	0x0000 - 0xE147 (0 - 110%)	OVP threshold (for translation see programming guide)		3	0		
553	x		x			Overcurrent protection threshold (OCP)	RW	uint16	2	1	0x0000 - 0xE147 (0 - 110%)	OCP threshold (for translation see programming guide)		3	3		
556	x		x			Overpower protection threshold (OPP)	RW	uint16	2	1	0x0000 - 0xE147 (0 - 110%)	OPP threshold (for translation see programming guide)		3	6		
559	x		x			Undervoltage detection (UVD)	RW	uint16	2	1	0x0000 - 0xD0E5 (0 - 102%)	UVD threshold (for translation see programming guide)		3	9		
560	x		x			Adjustable UVD notification	RW	uint16	2	1	Adjustable UVD notification	0x0000 = nothing; 0x0001 = signal; 0x0002 = warning; 0x0003 = alarm		3	10		
561	x		x			Overvoltage detection (OVD)	RW	uint16	2	1	0x0000 - 0xD0E5 (0 - 102%)	OVD threshold (for translation see programming guide)		3	11		
562	x		x			Adjustable OVD notification	RW	uint16	2	1	Adjustable OVD notification	0x0000 = nothing; 0x0001 = signal; 0x0002 = warning; 0x0003 = alarm		3	12		
563	x		x			Undervoltage detection (UCD)	RW	uint16	2	1	0x0000 - 0xD0E5 (0 - 102%)	UCD threshold (for translation see programming guide)		3	13		
564	x		x			Adjustable UCD notification	RW	uint16	2	1	Adjustable UCD notification	0x0000 = nothing; 0x0001 = signal; 0x0002 = warning; 0x0003 = alarm		3	14		
565	x		x			Overcurrent detection (OCD)	RW	uint16	2	1	0x0000 - 0xD0E5 (0 - 102%)	OCD threshold (for translation see programming guide)		3	15		
566	x		x			Adjustable OCD notification	RW	uint16	2	1	Adjustable OCD notification	0x0000 = nothing; 0x0001 = signal; 0x0002 = warning; 0x0003 = alarm		3	16		
567	x		x			Overpower detection (OPD)	RW	uint16	2	1	0x0000 - 0xD0E5 (0 - 102%)	OPD threshold (for translation see programming guide)		3	17		
568	x		x			Adjustable OPD notification	RW	uint16	2	1	Adjustable OPD notification	0x0000 = nothing; 0x0001 = signal; 0x0002 = warning; 0x0003 = alarm		3	18		
650	x		x			Master-slave: Link mode on MS bus	RW	uint16	2	1	Coils : Mode	0x0000 = Slave; 0xFF00 = Master		4	0		
651	x					Master-slave: Address	RW	uint16	2	1	Reg : Address	0x0001...0x000F		4	1		
652	x		x			Master-slave: Link mode on Share bus	RW	uint16	2	1	Coils : Mode	0x0000 = Slave; 0xFF00 = Master		4	2		
653	x		x			Master-slave: Enable MS	RW	uint16	2	1	Coils : MS on/off	0x0000 = off; 0xFF00 = on		4	3		
654						Master-slave: Init MS	W	uint16	2	1	Coils : MS start init	0xFF00 = Start init		4	4		
655	x				x	Master-slave: Condition	R	uint16	2	1	Reg : MS status	0x00x					