



Watchdog™ Super Elite

BUCKET ELEVATOR & BELT CONVEYOR

HAZARD MONITORING SYSTEM



MODBUS TCP REGISTERS

Part No.'s - WDC4V4CAI, WDC4V46CAI

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Watchdog Super Elite (WDC4) Modbus TCP Registers

Key	
Base Register	30000
Type	Read Only
Function Code	Read Input Registers (04)
Transmission Data Format	Big Endian
X	Do Not Care Byte (Ignore)
x	Do Not Care Bits (Ignore)

Section	Reference	Settings	Data Types	Byte Order	Total Reg	Starting Reg	Ending Reg
1 (Header)	Table 1.0	Device Type	UINT16	(X:Device Type)	1	0	0
	Table 1.1	Protocol Version	UINT16	(X:Protocol Version)	1	1	1
	Table 1.2	Main Microcontroller Firmware Version	UINT16		1	2	2
	Table 1.3	Graphic Microcontroller Firmware Version	UINT16		1	3	3
	Table 1.4	Bottom Microcontroller Firmware Version	UINT16		1	4	4
	Reserved	Reserved Registers (5)	UINT16		5	5	9
2 (System Status)	Table 2.0	State	UINT16	(X:State)	1	10	10
	Table 2.1	Sub State	UINT16	(X:SubState)	1	11	11
	Table 2.2	Sub State Time	UINT16		1	12	12
	Table 2.3	Interlock & Relays	UINT16	(X:xxxxx:Stop Rel:Alarm Rel: Interlock)	1	13	13
	Table 2.4	Time/Date: Year	UINT16		1	14	14
	Table 2.5	Time/Date: Month	UINT16		1	15	15
	Table 2.6	Time/Date: Day	UINT16		1	16	16
	Table 2.7	Time/Date: Hour	UINT16		1	17	17
	Table 2.8	Time/Date: Minute	UINT16		1	18	18
	Table 2.9	Time/Date: Seconds	UINT16		1	19	19
	Table 2.10	Machine Start Year	UINT16		1	20	20
	Table 2.11	Machine Start Month	UINT16		1	21	21
	Table 2.12	Machine Start Day	UINT16		1	22	22
	Table 2.13	Machine Start Hour	UINT16		1	23	23
	Table 2.14	Machine Start Minute	UINT16		1	24	24
	Table 2.15	Machine Start Seconds	UINT16		1	25	25
	Table 2.16	Machine Run Time Minutes	UINT32	(X:M3:M2:M1)	2	26	27
	Table 2.17	Selected Profile	UINT16		1	28	28
Table 2.18	Pre-Notification Enabled/Disabled Flag	UINT16	(X:Pre-Notification Flag)	1	29	29	
	Reserved	Reserved Registers (9)	UINT16		9	30	38
3 (System Alarm)	Table 3.0	Alarm Source	UINT16		1	39	39
	Table 3.1	Alarm Condition	UINT16		1	40	40

Section	Reference	Settings	Data Types	Byte Order	Total Reg	Starting Reg	Ending Reg
	Table 3.2	Current Time to Shutdown	UINT16		1	41	41
	Table 3.3	Current Alarm Number, Total Number of Alarms	UINT16	(Total Alarms: Current Alarm Number)	1	42	42
	Reserved	Reserved Registers (5)	UINT16		5	43	47
4 (System Shutdown)	Table 4.0	Shutdown Cause	UINT16		1	48	48
	Table 4.1	Shutdown Condition	UINT16		1	49	49
	Table 4.2	Time to Shutdown	UINT16		1	50	50
	Reserved	Reserved Registers (5)	UINT16		5	51	55
5 (Speed)	Table 5.0	Speed Monitoring Source	UINT16		1	56	56
	Table 5.1	Speed Status	UINT16		1	57	
	Table 5.2	Calibrated Speed Value	UINT16		1	58	58
	Table 5.3	Running Speed in PPM	UINT16		1	59	59
	Table 5.4	Nominal Speed	UINT16		1	60	60
	Table 5.5	Scaling Factor	UINT16		1	61	61
	Table 5.6	Scaled Speed	UINT16		1	62	62
	Table 5.7	Underspeed Alarm %	UINT16		1	63	63
	Table 5.8	Underspeed Stop %	UINT16		1	64	64
	Table 5.9	Overspeed Alarm %	UINT16		1	65	65
	Table 5.10	Overspeed Stop %	UINT16		1	66	66
	Reserved	Reserved Registers (10)	UINT16		10	67	76
6 (Alignment)	Table 6.0	Head Monitoring Type	UINT16		1	77	77
Contact/Pulsed	Table 6.1	Head Status (Pair:Left:Right)	UINT16	(X:xx:pp:ll:rr)	1	78	78
	Table 6.2	Head Pair Value	UINT16		1	79	79
	Table 6.3	Head Left Value	UINT16		1	80	80
	Table 6.4	Head Right Value	UINT16		1	81	81
	Table 6.5	Tail Monitoring Type	UINT16		1	82	82
	Table 6.6	Tail Status (Pair:Left:Right)	UINT16	(X:xx:pp:ll:rr)	1	83	83
	Table 6.7	Tail Pair Value	UINT16		1	84	84
	Table 6.8	Tail Left Value	UINT16		1	85	85
	Table 6.9	Tail Right Value	UINT16		1	86	86
	Reserved	Reserved Registers (5)	UINT16		5	87	91
7 (Rub Block)	Table 7.0	Head Left Rub Block Status	INT16		1	92	92
	Table 7.1	Head Left Rub Block Absolute Alarm Value	INT16		1	93	93
	Table 7.2	Head Left Rub Block Value	INT16		1	94	94
	Table 7.3	Head Right Rub Block Status	INT16		1	95	
	Table 7.4	Head Right Rub Block Absolute Alarm Value	INT16		1	96	
	Table 7.5	Head Right Rub Block Value	INT16		1	97	
	Table 7.6	Tail Left Rub Block Status	INT16		1	98	
	Table 7.7	Tail Left Rub Block Absolute Alarm Value	INT16		1	99	
	Table 7.8	Tail Left Rub Block Value	INT16		1	100	
	Table 7.9	Tail Right Rub Block Status	INT16		1	101	

Section	Reference	Settings	Data Types	Byte Order	Total Reg	Starting Reg	Ending Reg
	Table 7.10	Tail Right Rub Block Absolute Alarm Value	INT16		1	102	
	Table 7.11	Tail Right Rub Block Value	INT16		1	103	
	Reserved	Reserved Registers (6)	UINT16		6	104	109
8 (Temperature)	Table 8.0	HBS 1 Status	UINT16		1	110	110
	Table 8.1	HBS 1 Absolute Alarm Value	INT16		1	111	111
	Table 8.2	HBS 1 Value	INT16		1	112	112
	Table 8.3	HBS 2 Status	UINT16		1	113	113
	Table 8.4	HBS 2 Absolute Alarm Value	INT16		1	114	114
	Table 8.5	HBS 2 Value	INT16		1	115	115
	Table 8.6	HBS 3 Status	UINT16		1	116	116
	Table 8.7	HBS 3 Absolute Alarm Value	INT16		1	117	117
	Table 8.8	HBS 3 Value	INT16		1	118	118
	Table 8.9	HBS 4 Status	UINT16		1	119	119
	Table 8.10	HBS 4 Absolute Alarm Value	INT16		1	120	120
	Table 8.11	HBS 4 Value	INT16		1	121	121
	Table 8.12	HBS 5 Status	UINT16		1	122	122
	Table 8.13	HBS 5 Absolute Alarm Value	INT16		1	123	123
	Table 8.14	HBS 5 Value	INT16		1	124	124
	Table 8.15	HBS 6 Status	UINT16		1	125	125
	Table 8.16	HBS 6 Absolute Alarm Value	INT16		1	126	126
	Table 8.17	HBS 6 Value	INT16		1	127	127
	Table 8.18	AMB 1 Status	UINT16		1	128	128
	Table 8.19	AMB 1 Absolute Alarm Value	INT16		1	129	129
	Table 8.20	AMB 1 Value	INT16		1	130	130
	Table 8.21	AMB 2 Status	UINT16		1	131	131
	Table 8.22	AMB 2 Absolute Alarm Value	INT16		1	132	132
	Table 8.23	AMB 2 Value	INT16		1	133	133
	Reserved	Reserved (17)	UINT16		17	134	150
9 (Auxiliary)	Table 9.0	Plug Monitoring	UINT16	(X:xxxxx>Status:Alarm Condition:Enabled/Disable)	1	151	151
	Table 9.1	Pulley Monitoring	UINT16	(X:xxxxx>Status:Alarm Condition:Enabled/Disable)	1	152	152
	Reserved	Reserved Registers (5)	UINT16		5	153	157
10 (Test Mode)	Table 10.1	Test State (ALIGN, HBS, US, OS, ALR)	UINT16	(X:xxx:ALIGN:HBS:US:OS:ALR)	1	158	158
	Reserved	Reserved Registers (5)	UINT16		5	159	163
11 (Ethernet)	Table 11.0	DHCP Status	UINT16	(X:DHCP Status)	1	164	164
	Table 11.1 a,b	IP Address	UINT32	(OCTETS 4:3:2:1)	2	165	166
	Table 11.2 a,b	Subnet Mask	UINT32	(OCTETS 4:3:2:1)	2	167	168
	Table 11.3 a,b	Gateway	UINT32	(OCTETS 4:3:2:1)	2	169	170
	Table 11.4 a,b	DNS Server 1	UINT32	(OCTETS 4:3:2:1)	2	171	172
	Table 11.5 a,b	DNS Server 2	UINT32	(OCTETS 4:3:2:1)	2	173	174
	Table 11.6 a,b,c	MAC Address	UINT64	(OCTETS 6:5:4:3:2:1:X:X)	4	175	178

Section	Reference	Settings	Data Types	Byte Order	Total Reg	Starting Reg	Ending Reg
	Table 11.7 a,b	UDF ID	UINT32	(OCTETS 4:3:2:1)	2	179	180
	Table 11.8	HazardMon Status	UINT16		1	181	181
	Reserved	Reserved Registers (10)	UINT16		10	182	191
12 (SD card)	Table 12.0	SD Card Status	UINT16	(X:SD Card Status)	1	192	192
	Reserved	Reserved Registers (13)	UINT16		13	193	205
13 (Add-On Cards)	Table 13.0	EXP1, PLC Board 1	UINT16	(xxxxxxx>Status: xxxx:R4:R3:R2:R1)	1	206	206
Approved WDC4 only support one card	Table 13.1	EXP2, TBD	UINT16	TBD	1	207	207

Watchdog Super Elite (WDC4) Modbus Register Details

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Section 1 (Header)

Table 1.0

Base Register Address	Modbus Register	Setting
30000	0	Device Type

Device Type	Value
WDC4	1

Table 1.1

Base Register Address	Modbus Register	Setting
30000	1	Protocol Version

Protocol Version	Value
WDC4	1239

Table 1.2

Base Register Address	Modbus Register	Setting
30000	2	Main Microcontroller Firmware Version

Table 1.3

Base Register Address	Modbus Register	Setting
30000	3	Graphics Microcontroller Firmware Version

Table 1.4

Base Register Address	Modbus Register	Setting
30000	4	Bottom Microcontroller Firmware Version

Section 2 (System Status)

Table 2.0

Base Register Address	Modbus Register	Setting
30000	10	State

State	Value
INVALID	0
INITIALISING	1
STOPPED	2
STARTING	3
RUNNING	4
TEST_HBS	5
TEST_US	6
TEST_OS	7
TEST_ALIGN	8
TEST_ALM_RLY	9
STOPPING	10
NOT_CALIBRATED	11
CALIBRATION_WAIT	12
CALIBRATION_DELAY	13
CALIBRATING	14

Table 2.1

Base Register Address	Modbus Register	Setting
30000	11	Sub State

State	Value
NO_ALARMS	0
ALARM	1
SEE_MANUAL	2
START_ELEVATOR	3
STARTUP_TIMEOUT	4
CALIBRATION_IN_PROGRESS	5
CALIBRATION_ERROR	6
JOG_DELAY	7
INTERLOCK_OFF	8
I2C_BUS_ERROR	9

Table 2.2

Base Register Address	Modbus Register	Setting
30000	12	Sub State Time

Timer	Description
Sub State Time	Time in Sub State (ms)

Table 2.3

Base Register Address	Modbus Register	Setting
30000	13	Interlock & Relays

Flags	Bit position
Interlock	0
Alarm Relay	1
Stop Relay	2

Table 2.4

Base Register Address	Modbus Register	Setting
30000	14	Time/Date: Year

Register format	Function
16 bit UINT	Year

Table 2.5

Base Register Address	Modbus Register	Setting
30000	15	Time/Date: Month

Register type	Function
16 bit UINT	Month

Table 2.6

Base Register Address	Modbus Register	Setting
30000	16	Time/Date: Day

Register type	Function
16 bit UINT	Day

Table 2.7

Base Register Address	Modbus Register	Setting
30000	17	Time/Date: Hour

Register type	Function
16 bit UINT	Hour

Table 2.8

Base Register Address	Modbus Register	Setting
30000	18	Time/Date: Minutes

Register type	Function
16 bit UINT	Minutes

Table 2.9

Base Register Address	Modbus Register	Setting
30000	19	Time/Date: Seconds

Register type	Function
16 bit UINT	Seconds

Table 2.10

Base Register Address	Modbus Register	Setting
30000	20	Machine Start Year

Register type	Function
16 bit UINT	Year

Table 2.11

Base Register Address	Modbus Register	Setting
30000	21	Machine Start Month

Register type	Function
16 bit UINT	Month

Table 2.12

Base Register Address	Modbus Register	Setting
30000	22	Machine Start Day

Register type	Function
16 bit UINT	Day

Table 2.13

Base Register Address	Modbus Register	Setting
30000	23	Machine Start Hour

Register type	Function
16 bit UINT	Hour

Table 2.14

Base Register Address	Modbus Register	Setting
30000	24	Machine Start Minutes

Register type	Function
16 bit UINT	Minutes

Table 2.15

Base Register Address	Modbus Register	Setting
30000	25	Machine Start Seconds

Register type	Function
16 bit UINT	Seconds

Table 2.16

Base Register Address	Modbus Register	Setting
30000	26-27	Machine Runtime Minutes

Order	Function
MSW	Runtime Minutes
LSW	Runtime Minutes

Table 2.17

Base Register Address	Modbus Register	Setting
30000	28	Selected Profile

Table 2.18

Base Register Address	Modbus Register	Setting
30000	29	Pre-Notification Enabled/Disabled Flag

Value	Function
0	OFF
1	ON

Section 3 (System Alarm)

Table 3.0

Base Register Address	Modbus Register	Setting
30000	39	Alarm Source

Value	State
1	SPEED
2	ALIGNMENT HEAD
3	ALIGNMENT TAIL
4	HBS1
5	HBS2
6	HBS3
7	HBS4
8	HBS5
9	HBS6
10	AMBIENT 1
11	AMBIENT 2
16	PLUG
17	PULLEY
18	RUB TAIL LEFT
19	RUB TAIL RIGHT
20	RUB HEAD LEFT
21	RUB HEAD RIGHT
22	STARTUP
23	ACCELERATION

Table 3.1

Base Register Address	Modbus Register	Setting
30000	40	Alarm Condition

Alarm source if Modbus Register (39) = SPEED	State
0	HEALTHY
1	SEVERE UNDER SPEED
2	UNDER SPEED
3	SEVERE OVER SPEED
4	OVER SPEED

Alarm source if Modbus Register (39) =TEMPERATURE	State
0	HEALTHY
1	OPEN CIRCUIT
2	SHORT CIRCUIT
3	ABSOLUTE
4	RELATIVE
5	RATE OF RISE
6	I2C BUS
7	PRE ABSOLUTE

Table 3.2

Base Register Address	Modbus Register	Setting
30000	41	Current Time to Shutdown

Table 3.3

Base Register Address	Modbus Register	Setting
30000	42	Current Alarm Number/Total Number of Alarms

Order	Function
MSB	Current Alarm Number
LSB	Total Number of Alarms

Section 4 (System Shutdown)

Table 4.0

Base Register Address	Modbus Register	Setting
30000	48	Shutdown Cause

Value	State
1	SPEED
2	ALIGNMENT HEAD
3	ALIGNMENT TAIL
4	HBS1
5	HBS2
6	HBS3
7	HBS4
8	HBS5
9	HBS6
10	AMBIENT 1
11	AMBIENT 2
16	PLUG
17	PULLEY
18	RUB TAIL LEFT
19	RUB TAIL RIGHT
20	RUB HEAD LEFT
21	RUB HEAD RIGHT
22	STARTUP
23	ACCELERATION

Table 4.1

Base Register Address	Modbus Register	Setting
30000	49	Shutdown Condition

Condition if Modbus Register (48) = SPEED	State
0	HEALTHY
1	SEVERE UNDER SPEED
2	UNDER SPEED
3	SEVERE OVER SPEED
4	OVER SPEED

Condition if Modbus Register (48) = TEMPERATURE	State
0	HEALTHY
1	OPEN CIRCUIT
2	SHORT CIRCUIT
3	ABSOLUTE
4	RELATIVE
5	RATE OF RISE
6	I2C BUS
7	PRE ABSOLUTE

Table 4.2

Base Register Address	Modbus Register	Setting
30000	50	Time to Shutdown

Section 5 (Speed)

Table 5.0

Base Register Address	Modbus Register	Setting
30000	56	Speed Monitoring Source

Enumeration	State
0	DISABLED
1	MAS
2	DEDICATED
3	DIFFERENTIAL

Table 5.1

Base Register Address	Modbus Register	Setting
30000	57	Speed Status

Value	State
0	HEALTHY
1	SEVERE UNDER SPEED
2	UNDER SPEED
3	SEVERE OVER SPEED
4	OVER SPEED

Table 5.2

Base Register Address	Modbus Register	Setting
30000	58	Calibrated Speed Value

Table 5.3

Base Register Address	Modbus Register	Setting
30000	59	Running Speed in PPM

Table 5.4

Base Register Address	Modbus Register	Setting
30000	60	Nominal Speed

Table 5.5

Base Register Address	Modbus Register	Setting
30000	61	Scaling Factor

Table 5.6

Base Register Address	Modbus Register	Setting
30000	62	Scaled Speed

Table 5.7

Base Register Address	Modbus Register	Setting
30000	63	Under-Speed Alarm %

Table 5.8

Base Register Address	Modbus Register	Setting
30000	64	Under-Speed Stop %

Table 5.9

Base Register Address	Modbus Register	Setting
30000	65	Over-Speed Alarm %

Table 5.10

Base Register Address	Modbus Register	Setting
30000	66	Over-Speed Stop %

Section 6 (Alignment)

Table 6.0

Base Register Address	Modbus Register	Setting
30000	77	Head Monitoring Type

Value	State
0	OFF
1	PULSED
2	CONTACT
3	RUB BLOCK

Table 6.1

Base Register Address	Modbus Register	Setting
30000	78	Head Status (Pair:Left:Right)

Value	State
0	HEALTHY
1	HEAD IN ALARM

Table 6.2

Base Register Address	Modbus Register	Setting
30000	79	Head Pair Value

Table 6.3

Base Register Address	Modbus Register	Setting
30000	80	Head Left Value

Table 6.4

Base Register Address	Modbus Register	Setting
30000	81	Head Right Value

Table 6.5

Base Register Address	Modbus Register	Setting
30000	82	Tail Monitoring Type

Value	State
0	OFF
1	PULSED
2	CONTACT
3	RUB BLOCK

Table 6.6

Base Register Address	Modbus Register	Setting
30000	83	Tail Status (Pair:Left:Right)

Value	State
0	HEALTHY
1	TAIL IN ALARM

Table 6.7

Base Register Address	Modbus Register	Setting
30000	84	Tail Pair Value

Table 6.8

Base Register Address	Modbus Register	Setting
30000	85	Tail Left Value

Table 6.9

Base Register Address	Modbus Register	Setting
30000	86	Tail Right Value

Section 7 (Rub Block)

Table 7.0

Base Register Address	Modbus Register	Setting
30000	92	Head Left Rub Block Status

Value	Status
-20000	OFF
0	HEALTHY
1	OPEN CIRCUIT
2	SHORT CIRCUIT
3	ABSOLUTE
4	RELATIVE
5	RATE OF RISE
6	I2C BUS
7	PRE ABSOLUTE

Table 7.1

Base Register Address	Modbus Register	Setting
30000	93	Head Left Rub Block Absolute Alarm Value

Table 7.2

Base Register Address	Modbus Register	Setting
30000	94	Head Left Rub Block Value

Table 7.3

Base Register Address	Modbus Register	Setting
30000	95	Head Right Rub Block Status

Value	Status
Refer to Values/Status definitions for the setting in Table 7.0	

Table 7.4

Base Register Address	Modbus Register	Setting
30000	96	Head Right Rub Block Absolute Alarm Value

Table 7.5

Base Register Address	Modbus Register	Setting
30000	97	Head Right Rub Block Value

Table 7.6

Base Register Address	Modbus Register	Setting
30000	98	Tail Left Rub Block Status

Value	Status
Refer to Values/Status definitions for the setting in Table 7.0	

Table 7.7

Base Register Address	Modbus Register	Setting
30000	99	Tail Left Rub Block Absolute Alarm Value

Table 7.8

Base Register Address	Modbus Register	Setting
30000	100	Tail Left Rub Block Value

Table 7.9

Base Register Address	Modbus Register	Setting
30000	101	Tail Right Rub Block Status

Value	Status
Refer to Values/Status definitions for the setting in Table 7.0	

Table 7.10

Base Register Address	Modbus Register	Setting
30000	102	Tail Right Rub Block Absolute Alarm Value

Table 7.11

Base Register Address	Modbus Register	Setting
30000	103	Tail Right Rub Block Value

Section 8 (Temperature)

Table 8.0

Base Register Address	Modbus Register	Setting
30000	110	HBS1 Status

Value	Status
-20000	OFF
0	HEALTHY
1	OPEN CIRCUIT
2	SHORT CIRCUIT
3	ABSOLUTE
4	RELATIVE
5	RATE OF RISE
6	I2C BUS
7	PRE ABSOLUTE

Table 8.1

Base Register Address	Modbus Register	Setting
30000	111	HBS1 Absolute Alarm Value

Table 8.2

Base Register Address	Modbus Register	Setting
30000	112	HBS1 Value

Table 8.3

Base Register Address	Modbus Register	Setting
30000	113	HBS2 Status

Value	Status
Refer to Values/Status definitions for the setting in Table 8.0	

Table 8.4

Base Register Address	Modbus Register	Setting
30000	114	HBS2 Absolute Alarm Value

Table 8.5

Base Register Address	Modbus Register	Setting
30000	115	HBS2 Value

Table 8.6

Base Register Address	Modbus Register	Setting
30000	116	HBS3 Status

Value	Status
Refer to Values/Status definitions for the setting in Table 8.0	

Table 8.7

Base Register Address	Modbus Register	Setting
30000	117	HBS3 Absolute Alarm Value

Table 8.8

Base Register Address	Modbus Register	Setting
30000	118	HBS3 Value

Table 8.9

Base Register Address	Modbus Register	Setting
30000	119	HBS4 Status

Value	Status
Refer to Values/Status definitions for the setting in Table 8.0	

Table 8.10

Base Register Address	Modbus Register	Setting
30000	120	HBS4 Absolute Alarm Value

Table 8.11

Base Register Address	Modbus Register	Setting
30000	121	HBS4 Value

Table 8.12

Base Register Address	Modbus Register	Setting
30000	122	HBS5 Status

Value	Status
Refer to Values/Status definitions for the setting in Table 8.0	

Table 8.13

Base Register Address	Modbus Register	Setting
30000	123	HBS5 Absolute Alarm Value

Table 8.14

Base Register Address	Modbus Register	Setting
30000	124	HBS5 Value

Table 8.15

Base Register Address	Modbus Register	Setting
30000	125	HBS6 Status

Value	Status
Refer to Values/Status definitions for the setting in Table 8.0	

Table 8.16

Base Register Address	Modbus Register	Setting
30000	126	HBS6 Absolute Alarm Value

Table 8.17

Base Register Address	Modbus Register	Setting
30000	127	HBS6 Value

Table 8.18

Base Register Address	Modbus Register	Setting
30000	128	AMB1 Status

Value	Status
Refer to Values/Status definitions for the setting in Table 8.0	

Table 8.19

Base Register Address	Modbus Register	Setting
30000	129	AMB1 Absolute Alarm Value

Table 8.20

Base Register Address	Modbus Register	Setting
30000	130	AMB1 Value

Table 8.21

Base Register Address	Modbus Register	Setting
30000	131	AMB2 Status

Value	Status
Refer to Values/Status definitions for the setting in Table 8.0	

Table 8.22

Base Register Address	Modbus Register	Setting
30000	132	AMB2 Absolute Alarm Value

Table 8.23

Base Register Address	Modbus Register	Setting
30000	133	AMB2 Value

Section 9 (Auxiliary)

Table 9.0

Base Register Address	Modbus Register	Setting
30000	151	Plug Monitoring

Flags	Bit Position
Enabled/Disabled (OFF/ON)	0
Alarm Condition (ON/OFF)	1
Status (Healthy/Alarm)	2

Table 9.1

Base Register Address	Modbus Register	Setting
30000	152	Pulley Monitoring

Flags	Bit Position
Enabled/Disabled (OFF/ON)	0
Alarm Condition (ON/OFF)	1
Status (Healthy/Alarm)	2

Section 10 (Test Mode)

Table 10.1

Base Register Address	Modbus Register	Setting
30000	158	Test State

Flags	Bit Position
Alarm Relay Test	0
Over Speed Test	1
Under speed Test	2
HBS Test	3
Alignment Test	4

Section 11 (Ethernet)

Table 11.0

Base Register Address	Modbus Register	Setting
30000	164	DHCP Status

Value	State
0	DHCP Disabled
1	DHCP Enabled

Table 11.1a

Base Register Address	Modbus Register	Setting
30000	165	IP Address (High)
Note: Two most significant octets of the IP address.		

Table 11.1b

Base Register Address	Modbus Register	Setting
30000	166	IP Address (Low)
Note: Two least significant octets of the IP address.		

Table 11.2a

Base Register Address	Modbus Register	Setting
30000	167	Subnet Mask (High)
Note: Two most significant octets of the Subnet Mask.		

Table 11.2b

Base Register Address	Modbus Register	Setting
30000	168	Subnet Mask (Low)
Note: Two least significant octets of the Subnet Mask.		

Table 11.3a

Base Register Address	Modbus Register	Setting
30000	169	Gateway (High)
Note: Two most significant octets of the Gateway.		

Table 11.3b

Base Register Address	Modbus Register	Setting
30000	170	Gateway (Low)
Note: Two least significant octets of the Gateway.		

Table 11.4a

Base Register Address	Modbus Register	Setting
30000	171	DNS Server 1 (High)
Note: Two most significant octets of the DNS1.		

Table 11.4b

Base Register Address	Modbus Register	Setting
30000	172	DNS Server 1 (Low)
Note: Two least significant octets of the DNS1.		

Table 11.5a

Base Register Address	Modbus Register	Setting
30000	173	DNS Server 2 (High)
Note: Two most significant octets of the DNS2.		

Table 11.5b

Base Register Address	Modbus Register	Setting
30000	174	DNS Server 2 (Low)
Note: Two least significant octets of the DNS2.		

Table 11.6a

Base Register Address	Modbus Register	Setting
30000	175	MAC Address (High)
Note: Two most significant octets of the MAC address.		

Table 11.6b

Base Register Address	Modbus Register	Setting
30000	176	MAC Address (Medium)
Note: Two medium octets of the MAC address.		

Table 11.6c

Base Register Address	Modbus Register	Setting
30000	177	MAC Address (Low)
Note: Two least significant octets of the MAC address.		

Table 11.7a

Base Register Address	Modbus Register	Setting
30000	179	UDF ID (High)
Note: Two most significant octets of the UDF ID.		

Table 11.7b

Base Register Address	Modbus Register	Setting
30000	180	UDF ID (Low)
Note: Two least significant octets of the UDF ID.		

Table 11.8

Base Register Address	Modbus Register	Setting
30000	181	HazardMon Status

Value	State
0	Disconnected
1	Connected

Section 12 (SD Card)

Table 12.0

Base Register Address	Modbus Register	Setting
30000	192	SD Card Status

Flags	Bit Position
SD CARD ERROR R/W	1
SD CARD PRESENT	8

Section 13 (Add-On Cards)

Table 13.0

Base Register Address	Modbus Register	Setting
30000	206	EXP1, PLC Board 1

Flags	Bit Position
RELAY 1 ACTIVATED	0
RELAY 2 ACTIVATED	1
RELAY 3 ACTIVATED	2
RELAY 4 ACTIVATED	3
CONNECTED/DISCONNECTED	8

Table 13.1

Base Register Address	Modbus Register	Setting
30000	207	EXP2, TBD

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