PROLON

Ver 7.5.0

Modbus
Network Controller Configuration Properties

Modbus Object Type: Holding Registers

Name	Default	Min	Max	Modbus Reg #	Notes	Register breakdown
Device Type	5	5	5	1	(Not writable) 5= Network Controller	
Device Soft Ver	7.5	0	655.35	2	(Not writable)	
Device Hard Ver	5	0	0	3	(Not writable) 3= No SD Card / 4=With SD Card / 5=New Casing / PCB	
Address	99	1	127	4	Modbus Network Address	
Baudrate	3	0	3	5	0=9600 / 1=19200 / 2=38400 / 3=57600	
Timezone	7	0	25	6	0=GMT-12 … 25=GMT+13	
Use DST (Daylight Savings Time)	1	0	1	7	Automatically adjust for daylight savings time (0=NO / 1=YES)	
MAC Address 1	0	0	255	8	(Not writable) The unique MAC address embedded in the controller (1st byte)	
MAC Address 2	0	0	255	9	(Not writable) The unique MAC address embedded in the controller (2nd byte)	
MAC Address 3	0	0	255	10	(Not writable) The unique MAC address embedded in the controller (3rd byte)	
MAC Address 4	0	0	255	11	(Not writable) The unique MAC address embedded in the controller (4th byte)	
MAC Address 5	0	0	255	12	(Not writable) The unique MAC address embedded in the controller (5th byte)	
MAC Address 6	0	0	255	13	(Not writable) The unique MAC address embedded in the controller (6th byte)	
IP Mode	0	0	1	14	0=Use Static IP / 1=Use DHCP	
IP Address 1	192	0	255	15	IP address (1st byte)	
IP Address 2	168	0	255	16	IP address (2nd byte)	
IP Address 3	1	0	255	17	IP address (3rd byte)	
IP Address 4	99	0	255	18	IP address (4th byte)	
Subnet Mask 1	255	0	255	19	Subnet Mask (1st byte)	

Subnet Mask 2	255	0	255	20	Subnet Mask (2nd byte)	
Subnet Mask 3	255	0	255	21	Subnet Mask (3rd byte)	
Subnet Mask 4	0	0	255	22	Subnet Mask (4th byte)	
Default Gateway 1	192	0	255	23	Default Gateway (1st byte)	
Default Gateway 2	168	0	255	24	Default Gateway (2nd byte)	
Default Gateway 3	1	0	255	25	Default Gateway (3rd byte)	
Default Gateway 4	1	0	255	26	Default Gateway (4th byte)	
DST Active Month	3	1	12	27	1=January … 12=December	
DST Active Week	1	0	4	28	0= First weekend of month … 4=5th weekend of month	
DST Deactive Month	11	1	12	29	1=January … 12=December	
DST Deactive Week	0	0	4	30	0= First weekend of month … 4=5th weekend of month	
Device Name 1	0	0	0	31	Device Name (1st character)	
Device Name 2	0	0	0	32	Device Name (2nd character)	
Device Name 3	0	0	0	33	Device Name (3rd character)	
Device Name 4	0	0	0	34	Device Name (4th character)	
Device Name 5	0	0	0	35	Device Name (5th character)	
Device Name 6	0	0	0	36	Device Name (6th character)	
Device Name 7	0	0	0	37	Device Name (7th character)	
Device Name 8	0	0	0	38	Device Name (8th character)	
Device Name 9	0	0	0	39	Device Name (9th character)	
Device Name 10	0	0	0	40	Device Name (10th character)	
Device Name 11	0	0	0	41	Device Name (11th character)	
Device Name 12	0	0	0	42	Device Name (12th character)	
Device Name 13	0	0	0	43	Device Name (13th character)	
Device Name 14	0	0	0	44	Device Name (14th character)	
Device Name 15	0	0	0	45	Device Name (15th character)	
Device Name 16	0	0	0	46	Device Name (16th character)	
Outside Temperature Source	0	0	127	47	Address of the ProLon device that is the source of the Outside Temperature reading (0=function deactivated)	
Outside Temperature Distribution 1	0	0	255	48	Addresses of ProLon devices to receive the outside temperature (0=do not receive / 1=receive) (LSB=address#0 / MSB=address#15)	

Outside Temperature Distribution 2	0	0	255	49	Addresses of ProLon devices to receive the outside temperature (0=do not receive / 1=receive) (LSB=address#16 / MSB=address#31)	
Outside Temperature Distribution 3	0	0	255	50	Addresses of ProLon devices to receive the outside temperature (0=do not receive / 1=receive) (LSB=address#32 / MSB=address#47)	
Outside Temperature Distribution 4	0	0	255	51	Addresses of ProLon devices to receive the outside temperature (0=do not receive / 1=receive) (LSB=address#48 / MSB=address#63)	
Outside Temperature Distribution 5	0	0	255	52	Addresses of ProLon devices to receive the outside temperature (0=do not receive / 1=receive) (LSB=address#64 / MSB=address#79)	
Outside Temperature Distribution 6	0	0	255	53	Addresses of ProLon devices to receive the outside temperature (0=do not receive / 1=receive) (LSB=address#80 / MSB=address#95)	
Outside Temperature Distribution 7	0	0	255	54	Addresses of ProLon devices to receive the outside temperature (0=do not receive / 1=receive) (LSB=address#96 / MSB=address#111)	
Outside Temperature Distribution 8	0	0	255	55	Addresses of ProLon devices to receive the outside temperature (0=do not receive / 1=receive) (LSB=address#112 / MSB=address#127)	
Alerts/Datalog Language	1	0	1	56	0=Francais / 1=English	
Alerts/Datalog Temperature Units	1	0	1	57	0=Fahrenheit / 1=Celsius	
DNS Address 1	8	0	255	58	DNS address (1st byte)	
DNS Address 2	8	0	255	59	DNS address (2nd byte)	
DNS Address 3	8	0	255	60	DNS address (3rd byte)	
DNS Address 4	8	0	255	61	DNS address (4th byte)	

Quantity of Valid Weekly Routines	0	0	16	62	The quantity of valid weekly routines stored on the NC. Routines must be stored in order, without any gaps.	
Quantity of Valid Annual Routines	0	0	16	63	The quantity of valid annual routines stored on the NC. Routines must be stored in order, without any gaps.	
Allow Cloud Communication	1	0	1	64	0=Cloud Comm Disabled / 1=Cloud Comm Enabled	
Alert Type	0	0	2	65	0=Email Only / 1=Push Notif Only / 2=Both Email & Push Notif	
Qty of Valid Alerts (Read-Only)	0	0	200	66		
Qty of Valid Logs (Read-Only)	0	0	100	67		
Qty of Valid Devices (Read-Only)	0	0	126	68	Applies to the Schedule Distribution List (Registers 3724 to 4227).	
Data Distribution Period	6	1	240	69	Multiplied by 5 to obtain a possible range of 5 sec to 1200 sec (20 min). Default is 6 (30 seconds).	
Supply Water Source	0	0	127	70	Address of the Prolon device that is the source of the Supply Water Temperature reading (0=function deactivated)	
Extra RS485 Timeout Delay	100	0	1500	71		
Outside Humidity Source	0	0	127	72	Address of the Prolon device that is the source of the Outside Humidity reading (0=function deactivated)	
Datalogging Status	0	0	15	82	LSB = Logging Started / 2nd LSB = Search for used Space Complete / 3rd LSB = Free Space Found / 4th LSB = Force new log on start (write only). For writing, only the 1st and 4th LSB are considered.	

DataLog Max Size 1	0	0	65535	83	Specify the maximum size allowed for the datalog (0=No maximum - use all available space). Once reached, datalog will wrap around and erase the oldest data. (Low WORD)	
DataLog Max Size 2	0	0	65535	84	Specify the maximum size allowed for the datalog (0=No maximum - use all available space). Once reached, datalog will wrap around and erase the oldest data. (High WORD)	
DataLog Total Sectors 1	0	0	65535	85	The total amount of sectors found on the SD card. (Low WORD)	
DataLog Total Sectors 2	0	0	65535	86	The total amount of sectors found on the SD card. (High WORD)	
DataLog Used Sectors 1	0	0	65535	87	The total amount of sectors already in use on the SD card. (Low WORD)	
DataLog Used Sectors 2	0	0	65535	88	The total amount of sectors already in use on the SD card. (High WORD)	
Datalog File Size 1	0	0	65535	89	The size of the ProLon datalog currently saved on the SD card. (Low WORD)	
Datalog File Size 2	0	0	65535	90	The size of the ProLon datalog currently saved on the SD card. (High WORD)	
Launch Get List Function	0	0	1	98	Set to 1 to launch the Get List Function (completes in 15 seconds)	
Reset	0	0	1	100	Set to 1 to cause the scheduler to reset	
Current Time - Year	0	0	99	101	Years after 2000 (Registers 101 to 107 must be read at the same time in a single ReadMultiple operation)	
Current Time - Month	1	1	12	102	1=Jan … 12=December (Registers 101 to 107 must be read at the same time in a single ReadMultiple operation)	

Current Time - Day of Week	0	0	6	103	0=Sunday … 6=Saturday (Registers 101 to 107 must be read at the same time in a single ReadMultiple operation)	
Current Time - Day	1	1	31	104	Day of the month (Registers 101 to 107 must be read at the same time in a single ReadMultiple operation)	
Current Time - Hours	0	0	23	105	Hours (Registers 101 to 107 must be read at the same time in a single ReadMultiple operation)	
Current Time - Minute	0	0	59	106	Minute (Registers 101 to 107 must be read at the same time in a single ReadMultiple operation)	
Current Time - Seconds	0	0	59	107	Seconds (Registers 101 to 107 must be read at the same time in a single ReadMultiple operation)	
Weekly Routines - Identification	255	0	255	108	Registers 108 to 395. There is a maximum of 16 Routines. Each Routine is 18 regs wide. Each Routine must be accessed using a Multiple Read/Write operation.	1 Routine = 18 registers --> [First 16 regs = Name of Routine (1 character per reg)] [Last 2 regs = IDs of the 2 annual routines associated with this weekly routine. Valid IDs are 0-15. Setting to invalid means no annual routine will be used]
Annual Routines - Identification	255	0	255	396	Registers 396 to 651. There is a maximum of 16 Routines. Each Routine is 16 regs wide. Each Routine must be accessed using a Multiple Read/Write operation.	1 Routine = 16 registers --> [Name of Routine (1 character per reg)]
Annual Routines - Dates	0	0	255	652	Registers 652 to 1419. There is a maximum of 16 Routines. Each Routine has 12 Months (ordered Jan, Feb, etc…), each Month is 4 regs wide (48 regs per Routine). Each Month must be accessed using a Multiple Read/Write operation.	1 Month = 4 registers --> [1st reg = 1st 8 days of the month, as follows: LSB=1st day of the month, 2nd LSB=2nd day of the month, etc… (Only the first 8 bits of a reg are used). Set bit to 1=Holiday/0=Normal] [2nd reg = next 8 days of the month] etc…

Weekly Routine - Schedules	127	0	255	1420	Registers 1420 to 3723. There is a maximum of 16 Routines. Each Routine has 9 Days (Sunday to Saturday, Holiday1, Holiday2), each Day is 16 regs wide (144 regs per routine). Each Day must be accessed using a Multiple Read/Write operation.	1 Day = 16 registers --> ([1 reg for the hour] [1 reg for the minute]) x 8 periods in a day, each period alternating Occupied/Unoccupied, starting with Occupied. Invalid times are ignored.
Schedule Distribution	255	0	255	3724	Registers 3724 to 4227. There is a maximum of 126 Devices that can receive a schedule. Each Device is 4 registers wide. Each Device must be accessed using a Multiple Read/Write operation.	1 Device = 4 registers --> [1st = Address of the device (1-127)] [2nd= 1st Weekly Routine ID assigned to this device (0-15)] [3rd= 2nd Weekly Routine ID assigned to this device (0-15)] [4th= Status (LSB=Occupied/Unoccupied) (2nd LSB = Override Enable)]
Weekly Routines - Status	0	0	0	4228	Registers 4228 to 4243. There is an override register available for each routine (16 total). (LSB=Occupied/Unoccupied) (2nd LSB = Override Enable)	
Email List	0	0	255	4452	Registers 4452 to 4595. There is a maximum of 3 Email Addresses with 48 registers per email (2 characters per register). Each Email Address must be accessed using a Multiple Read/Write operation.	
Alert Entries Block 1 (1-100)	0	0	65535	4644	Registers 4644 to 7043. There is a maximum of 100 Alerts. Each Alert is 24 registers wide. Each Alert must be accessed using a Multiple Read/Write operation.	[Reg 1: Device Address --> Bit9=ThisAlertHasNotChanged] [Reg 2: Modbus Register to be polled] [Reg 3: Alert Type (<,>,=,Periodic)] [Reg 4: Alert Value] [Reg 5: Alert Unit] [Reg 6: Alert Group] [Reg 7: Debounce Time -> MSB=SendNow] [Reg 8: Device Type] [Re
DataLog Entries Block 1 (1-50)	0	0	65535	7044	Registers 7044 to 8143. There is a maximum of 50 Logs Entries. Each Log Entry is 22 registers wide. Each Log Entry must be accessed using a Multiple Read/Write operation.	[Reg 1: Device Address] [Reg 2: Modbus Register to be polled] [Reg 3: Poll Type (0=Interval/1=Offset)] [Reg 4: Poll Condition] [Reg 5: Poll Unit] [Reg 6: Device Type] [Reg 7-14: Poll Name] [Reg 15-22: Dev Name]

Schedule Destination Regs	0	0	65535	8144	Registers 8144 to 8269. Specifies the destination register for each device found in "Schedule Distribution". Setting to zero uses default ProLon schedule register 136.	
Found List	0	0	65535	8270	Registers 8270 to 8277. LSB=Addr0, MSB=Addr127	
Alert Entries Block 2 (101-200)	0	0	65535	8278	Registers 8278 to 10677. There is a maximum of 100 Alerts. Each Alert is 24 registers wide. Each Alert must be accessed using a Multiple Read/Write operation.	[Reg 1: Device Address --> Bit9=ThisAlertHasNotChanged] [Reg 2: Modbus Register to be polled] [Reg 3: Alert Type (<,>,=,Periodic)] [Reg 4: Alert Value] [Reg 5: Alert Unit] [Reg 6: Alert Group] [Reg 7: Debounce Time -> MSB=SendNow] [Reg 8: Device Type] [Re
DataLog Entries Block 2 (51-100)	0	0	65535	10678	Registers 10678 to 11777. There is a maximum of 50 Logs Entries. Each Log Entry is 22 registers wide. Each Log Entry must be accessed using a Multiple Read/Write operation.	[Reg 1: Device Address] [Reg 2: Modbus Register to be polled] [Reg 3: Poll Type (0=Interval/1=Offset)] [Reg 4: Poll Condition] [Reg 5: Poll Unit] [Reg 6: Device Type] [Reg 7-14: Poll Name] [Reg 15-22: Dev Name]
Supply Water Distribution 1	0	0	255	11778	Addresses of ProLon devices to receive the water supply temperature (0=do not receive / 1=receive) (LSB=address#0(unused) / MSB=address#15)	
Supply Water Distribution 2	0	0	255	11779	Addresses of ProLon devices to receive the water supply temperature (0=do not receive / 1=receive) (LSB=address#16 / MSB=address#31)	
Supply Water Distribution 3	0	0	255	11780	Addresses of ProLon devices to receive the water supply temperature (0=do not receive / 1=receive) (LSB=address#32 / MSB=address#47)	

Supply Water Distribution 4	0	0	255	11781	Addresses of ProLon devices to receive the water supply temperature (0=do not receive / 1=receive) (LSB=address#48 / MSB=address#63)	
Supply Water Distribution 5	0	0	255	11782	Addresses of ProLon devices to receive the water supply temperature (0=do not receive / 1=receive) (LSB=address#64 / MSB=address#79)	
Supply Water Distribution 6	0	0	255	11783	Addresses of ProLon devices to receive the water supply temperature (0=do not receive / 1=receive) (LSB=address#80 / MSB=address#95)	
Supply Water Distribution 7	0	0	255	11784	Addresses of ProLon devices to receive the water supply temperature (0=do not receive / 1=receive) (LSB=address#96 / MSB=address#111)	
Supply Water Distribution 8	0	0	255	11785	Addresses of ProLon devices to receive the water supply temperature (0=do not receive / 1=receive) (LSB=address#112 / MSB=address#127)	
Outside Humidity Distribution 1	0	0	255	11786	Addresses of ProLon devices to receive the outside humidity (0=do not receive / 1=receive) (LSB=address#0(unused) / MSB=address#15)	
Outside Humidity Distribution 2	0	0	255	11787	Addresses of ProLon devices to receive the outside humidity (0=do not receive / 1=receive) (LSB=address#16 / MSB=address#31)	

Outside Humidity Distribution 3	0	0	255	11788	Addresses of ProLon devices to receive the outside humidity (0=do not receive / 1=receive) (LSB=address#32 / MSB=address#47)	
Outside Humidity Distribution 4	0	0	255	11789	Addresses of ProLon devices to receive the outside humidity (0=do not receive / 1=receive) (LSB=address#48 / MSB=address#63)	
Outside Humidity Distribution 5	0	0	255	11790	Addresses of ProLon devices to receive the outside humidity (0=do not receive / 1=receive) (LSB=address#64 / MSB=address#79)	
Outside Humidity Distribution 6	0	0	255	11791	Addresses of ProLon devices to receive the outside humidity (0=do not receive / 1=receive) (LSB=address#80 / MSB=address#95)	
Outside Humidity Distribution 7	0	0	255	11792	Addresses of ProLon devices to receive the outside humidity (0=do not receive / 1=receive) (LSB=address#96 / MSB=address#111)	
Outside Humidity Distribution 8	0	0	255	11793	Addresses of ProLon devices to receive the outside humidity (0=do not receive / 1=receive) (LSB=address#112 / MSB=address#127)	