

PRTU

Firmware v1.8.0

Object	Name	Units	Default	Range	Description	R/W	Retained on Power Failure
AI1	Discharge Air Temperature	°F/°C	N/A	(-59) - 300	Air temperature entering controlled space	R	N
AI2	Return Air Temperature	°F/°C	N/A	(-59) - 300	Air temperature leaving controlled space	R	N
AI3	Outside Air Temperature	°F/°C	N/A	(-59) - 300	Air temperature outside of the building	R	N
AI4	10K Thermistor Spare (AI4)	°F/°C	N/A	(-59) - 300	Spare temperature sensor	R	N
AI5	10K Thermistor Spare (AI5)	°F/°C	N/A	(-59) - 300	Spare temperature sensor	R	N
AI6	10K Thermistor Spare (AI6)	°F/°C	N/A	(-59) - 300	Spare temperature sensor	R	N
AI7	0-10VDC Spare (AI7)	N/A	N/A	0-10VDC	Spare analog 0-10 VDC input	R	N
AI8	0-10VDC Spare (AI8)	N/A	N/A	0-10VDC	Spare analog 0-10 VDC input	R	N
AI9	0-10VDC Spare (AI9)	N/A	N/A	0-10VDC	Spare analog 0-10 VDC input	R	N
AI10	0-10VDC Spare (AI10)	N/A	N/A	0-10VDC	Spare analog 0-10 VDC input	R	N
AI11	0-10VDC Spare (AI11)	N/A	N/A	0-10VDC	Spare analog 0-10 VDC input	R	N
AI12	0-10VDC Spare (AI12)	N/A	N/A	0-10VDC	Spare analog 0-10 VDC input	R	N
AI13	Thermostat Temperature	°F/°C	N/A	(-59) - 300	Temperature at the connected thermostat	R	N
BI1	Binary Input 1	Open/Closed	Dynamic	Open/Closed	Binary Input can be tied to several signals. See O&M manual for detail. Input Menu	R	N
BI2	Binary Input 2	Open/Closed	Dynamic	Open/Closed	Binary Input can be tied to several signals. See O&M manual for detail. Input Menu.	R	N
A01	Fan (A01)	Volts DC	N/A	0-10VDC	Analog controlled fan speed	R/W	Y
A02	Heat (A02)	Volts DC	N/A	0-10VDC	Analog controlled heat	R/W	Y
A03	Cool (A03)	Volts DC	N/A	0-10VDC	Analog controlled cooling	R/W	Y
A04	Demand (A04)	Volts DC	N/A	0-10VDC	Analog controlled demand	R/W	Y
B01	Fan (B01)	Off/On	Dynamic	Off/On	Fan on or off	R/W	Y
B02	Cool 1 (B02)	Off/On	Dynamic	Off/On	Stage 1 cooling on or off	R/W	Y
B03	Cool 2 (B03)	Off/On	Dynamic	Off/On	Stage 2 cooling on or off	R/W	Y
B04	Cool 3 (B04)	Off/On	Dynamic	Off/On	Stage 3 cooling on or off	R/W	Y
B05	Cool 4 (B05)	Off/On	Dynamic	Off/On	Stage 4 cooling on or off	R/W	Y
B06	Heat 1 (B06)	Off/On	Dynamic	Off/On	Stage 1 heating on or off	R/W	Y
B07	Heat 2 (B07)	Off/On	Dynamic	Off/On	Stage 2 heating on or off	R/W	Y
B08	Heat 3 (B08)	Off/On	Dynamic	Off/On	Stage 3 heating on or off	R/W	Y
B09	Heat 4 (B09)	Off/On	Dynamic	Off/On	Stage 4 heating on or off	R/W	Y
B010	Cool Enable (B010)	Off/On	Dynamic	Off/On	Enables cooling	R/W	Y
AV1	Standalone Cooling Setpoint	°F/°C	73°F (22.5°C)	0 - 150	Cooling setpoint when in standalone mode	R/W	Y
AV2	Standalone Heating Setpoint	°F/°C	69°F (20.5°C)	0 - 150	Heating setpoint when in standalone mode	R/W	Y
AV3	Setpoint Difference	°F/°C	4°F (2°C)	0 - 20	Separation between heating and cooling (Standalone only)	R/W	Y
AV4	Day Minimum Setpoint	°F/°C	65°F (18°C)	32 - AV5	Setpoint at which controller will enter Heating mode during unoccupied periods (1 degree difference must be between heat and cool to adjust the range). The upper limit is one less than AV5	R/W	Y

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AV5	Day Minimum Setpoint	°F/°C	80°F (27°C)	AV4 - 100	Setpoint at which controller will enter Cooling mode during unoccupied periods (1 degree difference must be between cool and heat to adjust the range). The lower limit is one higher than AV4	R/W	Y
AV6	Night Cool Setpoint	°F/°C	83°F(28°C)	0 - 150	Cooling setpoint when unoccupied	R/W	Y
AV7	Night Heat Setpoint	°F/°C	62°F(17°C)	0 - 150	Heating setpoint when unoccupied	R/W	Y
AV8	Number of Zones	#	N/A	1-30	Number of zones being polled by PRTU	R/W	Y
AV9	Standalone PI	%	0	(-100)-100	PI setting when in standalone	R/W	N
AV10	Polled Cooling Demand	%	0	0-100	The demand for cooling from the polled zones	R/W	N
AV11	Polled Heating Demand	%	0	0-100	The demand for heating from the polled zones	R/W	N
AV12	Polled Deadband Demand	%	0	0-100	The demand for deadband from the polled zones	R/W	N
AV13	Stage Activate Delay	Minutes	4	0-60	Delay between stages of heating or cooling when activating	R/W	Y
AV14	Stage Deactivate Delay	Minutes	2	0-60	Delay between stages of heating or cooling when deactivating	R/W	Y
AV15	Mode Switchover Delay	Minutes	15	0-60	Delay between switching between heating and cooling	R/W	Y
AV16	Binary Output Minimum ON Time	Seconds	60	0-3600	Minimum amount of time that a binary output can be on	R/W	Y
AV17	Binary Output Minimum OFF Time	Seconds	300	0-3600	Minimum amount of time that a binary output can be off	R/W	Y
AV18	Standalone Proportional Band	°F/°C	2°F(1°C)	0-20	Temperature band through which the PI travels through 1 to 100% load in standalone mode	R/W	Y
AV19	Standalone Day Differential	°F/°C	1°F(0.5°C)	0-20	Temperature band on either side of the standalone setpoint where the PRTU is satisfied	R/W	Y
AV20	Polling Proportional Band	°F/°C	2°F(1°C)	0-20	Temperature band through which the PI travels through 1 to 100% load in polling mode	R/W	Y
AV21	Polling Day Differential	°F/°C	1°F(0.5°C)	0-20	Temperature band on either side of the polled setpoint where the PRTU is satisfied	R/W	Y
AV22	Motion Occupied Time	Seconds	240	10-1440	Length of time that motion will set the space to occupied	R/W	Y
AV23	Non-Majority Trip	%	35	1-50	If a polled zone is in the minority and is requesting above this trip point, it will receive what it is asking	R/W	Y
AV24	DAT Hot Trip 1	°F/°C	135°F(57°C)	0-180	1st Discharge Air Temperature hot trip point	R/W	Y
AV25	DAT Hot Trip 2	°F/°C	145°F(63°C)	0-180	2nd Discharge Air Temperature hot trip point	R/W	Y
AV26	RAT Hot Trip 1	°F/°C	120°F(48°C)	0-180	1st Return Air Temperature hot trip point	R/W	Y
AV27	RAT Hot Trip 2	°F/°C	125°F(51°C)	0-180	2nd Return Air Temperature hot trip point	R/W	Y
AV28	DAT Cold Trip 1	°F/°C	43°F(6°C)	0-180	1st Discharge Air Temperature cold trip point	R/W	Y
AV29	DAT Cold Trip 2	°F/°C	36°F(2°C)	0-180	2nd Discharge Air Temperature cold trip point	R/W	Y
AV30	RAT Cold Trip 1	°F/°C	55°F(13°C)	0-180	1st Return Air Temperature cold trip point	R/W	Y
AV31	RAT Cold Trip 2	°F/°C	50°F(10°C)	0-180	2nd Return Air Temperature cold trip point	R/W	Y
AV32	Number of Zones Up	#	Dynamic	0-(See AV8)	Number of zones that are being successfully polled by the PRTU, maximum is set by AV8 (Number of Zones)	R	N
AV33	Ping	N/A	0	0-255	Number of times the LCD T-Stat will beep. Useful for location a box/T-Stat. (For example, if the number 30 is written to this variable, the T-Stat will beep 30 times before zeroing this variable)	R/W	N

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AV34	POR Resets	#	Dynamic	N/A	Power out reset count. For internal use.	R	Y
AV35	BOR Resets	#	Dynamic	N/A	Brown out reset count. For internal use.	R	Y
AV36	WDT Resets	#	Dynamic	N/A	Watchdog timer reset count. For internal use.	R	Y
AV37	SWR Resets	#	Dynamic	N/A	Software reset count. For internal use.	R	Y
AV38	EXTR Resets	#	Dynamic	N/A	External power reset count. For internal use.	R	Y
AV39	IOPWR Resets	#	Dynamic	N/A	Illegal opcode reset count. For internal use.	R	Y
AV40	Trap Resets	#	Dynamic	N/A	Trap reset count. For internal use.	R	Y
AV41	Total Resets	#	Dynamic	N/A	Total controller reset count. For internal use.	R	Y
AV42	Zones Up (0-15) flag	#	Dynamic	Dynamic	Identifies zones numbers between 0 - 15 that are up when number is converted into binary. For internal use.	R	N
AV43	Zones Up (16-30) flag	#	Dynamic	Dynamic	Identifies zones numbers between 16 - 30 that are up when number is converted into binary. For internal use.	R	N
AV44	Deadband Zones (0-15) flag	#	Dynamic	Dynamic	Identifies zones numbers between 0 - 15 that are in deadband when number is converted into binary. For internal use.	R	N
AV45	Deadband Zones (16-30) flag	#	Dynamic	Dynamic	Identifies zones numbers between 16 - 30 that are in deadband when number is converted into binary. For internal use.	R	N
AV46	Cooling Zones (0-15) flag	#	Dynamic	Dynamic	Identifies zones numbers between 0 - 15 that are in cooling when number is converted into binary. For internal use.	R	N
AV47	Cooling Zones (16-30) flag	#	Dynamic	Dynamic	Identifies zones numbers between 16 - 30 that are in cooling when number is converted into binary. For internal use.	R	N
AV48	Heating Zones (0-15) flag	#	Dynamic	Dynamic	Identifies zones numbers between 0 - 15 that are in heating when number is converted into binary. For internal use.	R	N
AV49	Heating Zones (16-30) flag	#	Dynamic	Dynamic	Identifies zones numbers between 16 - 30 that are in heating when number is converted into binary. For internal use.	R	N
MV1	Occupancy Status	Text	Dynamic	5 States	1 - Schedule Unoccupied 2 - Schedule Occupied 3 - Override Unoccupied 4 - Override Occupied 5 - Motion Occupied	R	N
MV2	Strategy	Text	Dynamic	4 states	1 - Standalone 2 - Average Polling 3 - Non-Majority Polling 4 - Energy Hog	R/W	Y
MV3	Rooftop Status	Text	Dynamic	3 States	1 - Cooling 2 - Heating 3 - Deadband	R/W	N

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MV4	Pending Rooftop Status	Text	Dynamic	3 States	1 - Cooling 2 - Heating 3 - Deadband	R/W	N
MV5	Rooftop Mode	Text	Dynamic	5 States	1 - Auto 2 - Cool 3 - Heat 4 - Ventilation 5 - Off	R/W	Y
MV6	N/A	Text	Dynamic	4 States	1 - One 2 - Two 3 - Three 4 - Four	R	Y
MV7	Temperature Units	Text	Dynamic	2 States	1 - Fahrenheit 2 - Celsius	R/W	Y
MV8	Fan Configuration	Text	Dynamic	3 States	1 - Day/Night 2 - On Demand 3 - 24/7	R/W	Y
MV9	Non-Majority Mode	Text	Cooling	3 States	1 - Cooling 2 - Heating 3 - Deadband	R/W	Y
BV1	Motion Enable	Text	Dynamic	2 States	Allows motion to change the space to occupied	R/W	N
BV2	Polling Failed to Standalone	Text	Dynamic	2 States	Indicates if the PRTU polling has failed and reverted back to standalone True - Polling has failed and is in standalone mode False - Unit is polling successfully and is not in standalone mode	R/W	N