



**Weather MicroServer with Modbus TCP/IP Slave Interface or Modbus/RTU over COM2 (RS-485)**  
 All units are U.S. Customary; Temperature - °F, Barometric Pressure - InHg, Wind Speed - MPH, Rain - inches

## 32-Bit Registers

**All data accessed via (read only) Input Registers**

Data type **Long** = Signed 32 bit value  
 Data type **Float** = 32 bit floating point value  
 Byte Order: Little Endian  
 Node 1

Measurement	Description	Starting Modbus Offset	Columbia data type	Modbus Address	OPC data type	Dnp3 index
umtLastMeasTime	Time of last measurement	1	posix time	30001	Long	1
	Last measurement time stamp	3	posix time	30003	Long	
umtWindSpeed	Wind speed	5	float	30005	Float	2
	Wind speed time stamp	7	posix time	30007	Long	
umtRawWindDir	Wind direction - unadjusted	9	float	30009	Float	3
	Wind direction - unadjusted time stamp	11	posix time	30011	Long	
umtAdjWindDir	Wind direction	13	float	30013	Float	4
	Wind direction time stamp	15	posix time	30015	Long	
umtRelHumidity	Relative humidity	17	float	30017	Float	5
	Relative humidity time stamp	19	posix time	30019	Long	
umtRawBaromPress	Barometric pressure - unadjusted	21	float	30021	Float	6
	Barometric pressure - unadjusted time stamp	23	posix time	30023	Long	
umtAdjBaromPress	Barometric pressure	25	float	30025	Float	7
	Barometric pressure time stamp	27	posix time	30027	Long	
umtTrueNorthOffset	Electronics Compass wind direction offset	29	float	30029	Float	8
	Electronics Compass wind direction offset time stamp	31	posix time	30031	Long	
umtLastRain	Last reported time of rainfall	33	float	30033	Float	9
	Last reported time of rainfall time stamp	35	posix time	30035	Long	
umtTemp1	Air temperature	37	float	30037	Float	10
	Air temperature time stamp	39	posix time	30039	Long	
umtWindChill	Wind chill	41	float	30041	Float	11
	Wind chill time stamp	43	posix time	30043	Long	
umtHeatIndex	Heat index	45	float	30045	Float	12
	Heat index time stamp	47	posix time	30047	Long	
umtDewPoint	Dew Point	49	float	30049	Float	13
	Dew Point time stamp	51	posix time	30051	Long	
umtDensityAltitude	Density Altitude	53	float	30053	Float	14
	Density Altitude time stamp	55	posix time	30055	Long	
umt3SecRollAvgWindSpeed	3-sec avg of wind speed	57	float	30057	Float	15
	3-sec avg of wind speed time stamp	59	posix time	30059	Long	

umt3SecRollAvgWindDir	3-sec avg of wind direction	61	float	30061	Float	16
	3-sec avg of wind direction time stamp	63	posix time	30063	Long	
umt2MinRollAvgWindSpeed	2-min avg of wind speed	65	float	30065	Float	17
	2-min avg of wind speed time stamp	67	posix time	30067	Long	
umt2MinRollAvgWindDir	2-min avg of adjusted wind direction	69	float	30069	Float	18
	2-min avg of adjusted wind direction time stamp	71	posix time	30071	Long	
umt10MinRollAvgWindSpeed	10-min avg of wind speed	73	float	30073	Float	19
	10-min avg of wind speed time stamp	75	posix time	30075	Long	
umt10MinRollAvgWindDir	10-min avg of adjusted wind direction	77	float	30077	Float	20
	10-min avg of adjusted wind direction time stamp	79	posix time	30079	Long	
umt10MinWindGustDir	10-min wind direction at max wind speed	81	float	30081	Float	21
	10-min wind direction at max wind speed time stamp	83	posix time	30083	Long	
umt10MinWindGustSpeed	10-min max wind speed	85	float	30085	Float	22
	10-min max wind speed time stamp	87	posix time	30087	Long	
umt10MinWindGustTime	Time of 10-min max wind speed	89	posix time	30089	Float	23
	Time of 10-min max wind speed time stamp	91	posix time	30091	Long	
umt60MinWindGustDir	60-min wind direction at max wind speed	93	float	30093	Float	24
	60-min wind direction at max wind speed time stamp	95	posix time	30095	Long	
umt60MinWindGustSpeed	60-min max wind speed	97	float	30097	Float	25
	60-min max wind speed time stamp	99	posix time	30099	Long	
umt60MinWindGustTime	Gust time stamp during the last 60 min	101	posix time	30101	Long	26
	Gust time stamp during the last 60 min time stamp	103	posix time	30103	Long	
umtRainToday	Rain for the day	105	float	30105	Float	27
	Rain for the day time stamp	107	posix time	30107	Long	
umtRainThisWeek	Rain for the week	109	float	30109	Float	28
	Rain for the week time stamp	111	posix time	30111	Long	
umtRainThisMonth	Rain for the month	113	float	30113	Float	29
	Rain for the month time stamp	115	posix time	30115	Long	
umtRainThisYear	Rain for the year	117	float	30117	Float	30
	Rain for the year time stamp	119	posix time	30119	Long	
umtRainRate	Rain rate	121	float	30121	Float	31
	Rain rate time stamp	123	posix time	30123	Long	
umtHailToday	Hail today	125	float	30125	Float	32
	Hail today time stamp	127	posix time	30127	Long	
umtLastHail	Last hail	129	float	30129	Float	33
	Last hail time stamp	131	posix time	30131	Long	
umtHailRate	Hail rate	133	float	30133	Float	34
	Hail rate time stamp	135	posix time	30135	Long	
umtWetBulbGlobeTemp	Wet bulb globe temperature	137	float	30137	Float	35
	Wet bulb globe temperature time stamp	139	posix time	30139	Long	
umtSaturatedVaporPressure	Saturated vapor pressure	141	float	30141	Float	36
	Saturated vapor pressure time stamp	143	posix time	30143	Long	
umtVaporPressure	Vapor pressure	145	float	30145	Float	37
	Vapor pressure time stamp	147	posix time	30147	Long	
umtDryAirPressure	Dry air pressure	149	float	30149	Float	38
	Dry air pressure time stamp	151	posix time	30151	Long	
umtDryAirDensity	Dry air density	153	float	30153	Float	39

	Dry air density time stamp	155	posix time	30155	Long	
umtAbsoluteHumidity	Absolute humidity	157	float	30157	Float	40
	Absolute humidity time stamp	159	posix time	30159	Long	
umtAirDensityRatio	Air density ratio	161	float	30161	Float	41
	Air density ratio time stamp	163	posix time	30163	Long	
umtAdjustedAltitude	Adjusted altitude	165	float	30165	Float	42
	Adjusted altitude time stamp	167	posix time	30167	Long	
umtSAECorrectionFactor	SAE correction factor	169	float	30169	Float	43
	SAE correction factor time stamp	171	posix time	30171	Long	
umtWetAirDensity	Wet air density	173	float	30173	Float	44
	Wet air density time stamp	175	posix time	30175	Long	
umtWetBulbTemp	Wet bulb temperature	177	float	30177	Float	45
	Wet bulb temperature time stamp	179	posix time	30179	Long	
umtExtinctionCoefficient	Visibility extinction coefficient	181	float	30181	Float	46
	Visibility extinction coefficient time stamp	183	posix time	30183	Long	
umtVisibility	Visibility in miles	185	float	30185	Float	47
	Visibility time stamp	187	posix time	30187	Long	
umtLux	Visibility sensor light meter reading	189	float	30189	Float	48
	Light meter reading time stamp	191	posix time	30191	Long	
umtDayNight	Visibility sensor day/night indicator	193	float	30193	Float	49
	Day/Night indicator time stamp	195	posix time	30195	Long	
umtWindSpeed_2	Wind speed - 2nd sensor	197	float	30197	Float	50
	Wind speed - 2nd sensor time stamp	199	posix time	30199	Long	
umtRawWindDir_2	Wind direction - 2nd sensor	201	float	30201	Float	51
	Wind direction time stamp - 2nd sensor	203	posix time	30203	Long	
umt3SecRollAvgWindSpeed_2	3-sec avg of wind speed - 2nd sensor	205	float	30205	Float	52
	3-sec avg of wind speed time stamp - 2nd sensor	207	posix time	30207	Long	
umt3SecRollAvgWindDir_2	3-sec avg of wind direction - 2nd sensor	209	float	30209	Float	53
	3-sec avg of wind direction time stamp - 2nd sensor	211	posix time	30211	Long	
umt2MinRollAvgWindSpeed_2	2-min avg of wind speed - 2nd sensor	213	float	30213	Float	54
	2-min avg of wind speed time stamp - 2nd sensor	215	posix time	30215	Long	
umt2MinRollAvgWindDir_2	2-min avg of wind direction - 2nd sensor	217	float	30217	Float	55
	2-min avg of wind direction time stamp - 2nd sensor	219	posix time	30219	Long	
umt10MinRollAvgWindSpeed_2	10-min avg of wind speed - 2nd sensor	221	float	30221	Float	56
	10-min avg of wind speed time stamp - 2nd sensor	223	posix time	30223	Long	
umt10MinRollAvgWindDir_2	10-min avg of wind direction - 2nd sensor	225	float	30225	Float	57
	10-min avg of wind direction time stamp - 2nd sensor	227	posix time	30227	Long	
umt60MinWindGustDir_2	60-min wind direction at max wind speed - 2nd sensor	229	float	30229	Float	58
	60-min wind direction at max wind speed time stamp - 2nd sensor	231	posix time	30231	Long	
umt60MinWindGustSpeed_2	60-min max wind speed - 2nd sensor	233	float	30233	Float	59
	60-min max wind speed time stamp - 2nd sensor	235	posix time	30235	Long	
umt60MinWindGustTime_2	Gust time stamp during the last 60 min - 2nd sensor	237	float	30237	Float	60
	Gust time stamp during the last 60 min time stamp - 2nd sensor	239	posix time	30239	Long	
umt10MinWindGustDir_2	10-min wind direction at max wind speed - 2nd sensor	241	float	30241	Float	61
	10-min wind direction at max wind speed time stamp - 2nd sensor	243	posix time	30243	Long	
umt10MinWindGustSpeed_2	10-min max wind speed - 2nd sensor	245	float	30245	Float	62
	10-min max wind speed time stamp - 2nd sensor	247	posix time	30247	Long	

umt10MinWindGustTime_2	Gust time stamp during the last 10 min - 2nd sensor	249	float	30249	Float	63
	Gust time stamp during the last 10 min time stamp - 2nd sensor	251	posix time	30251	Long	
umtTemp2	Temperature 2	253	float	30253	Float	64
	Temperature 2 time stamp	255	posix time	30255	Long	
umtTemp3	Temperature 3	257	float	30257	Float	65
	Temperature 3 time stamp	259	posix time	30259	Long	
umtTemp4	Temperature 4	261	float	30261	Float	66
	Temperature 4 time stamp	263	posix time	30263	Long	
umtSolarRadiation	Solar Radiation	265	float	30265	Float	67
	Solar Radiation time stamp	267	posix time	30267	Long	
umtSolarRadiation_2	Solar Radiation 2	269	float	30269	Float	68
	Solar Radiation 2 time stamp	271	posix time	30271	Long	
umtSolarRadiation_3	Solar Radiation 3	273	float	30273	Float	69
	Solar Radiation 3 time stamp	275	posix time	30275	Long	
umtSolarRadiation_4	Solar Radiation 4	277	float	30277	Float	70
	Solar Radiation 4 time stamp	279	posix time	30279	Long	
umtRainLastHr	Rain Last Hour	281	float	30281	Float	71
	Rain Last Hour time stamp	283	posix time	30283	Long	
umtRainLastHr_2	Rain Last Hour - 2nd sensor	285	float	30285	Float	72
	Rain Last Hour time stamp - 2nd sensor	287	posix time	30287	Long	
umtRainToday_2	Rain for the day - 2nd sensor	289	float	30289	Float	73
	Rain for the day time stamp - 2nd sensor	291	posix time	30291	Long	
umtRainThisWeek_2	Rain for the week - 2nd sensor	293	float	30293	Float	74
	Rain for the week time stamp - 2nd sensor	295	posix time	30295	Long	
umtRainThisMonth_2	Rain for the month - 2nd sensor	297	float	30297	Float	75
	Rain for the month time stamp - 2nd sensor	299	posix time	30299	Long	
umtRainThisYear_2	Rain for the year - 2nd sensor	301	float	30301	Float	76
	Rain for the year time stamp - 2nd sensor	303	posix time	30303	Long	
umtRainRate_2	Rain rate - 2nd sensor	305	float	30305	Float	77
	Rain rate time stamp - 2nd sensor	307	posix time	30307	Long	
umtPAR	PAR	309	float	30309	Float	78
	PAR time stamp	311	posix time	30311	Long	
umtPAR_2	PAR - 2nd sensor	313	float	30313	Float	79
	PAR time stamp - 2nd sensor	315	posix time	30315	Long	
umtRelHumidity_2	Relative Humidity - 2nd sensor	317	float	30317	Float	80
	Relative Humidity time stamp - 2nd sensor	319	posix time	30319	Long	
umtRawBaromPress_2	Raw Barometric Pressure - 2nd sensor	321	float	30321	Float	81
	Raw barometric Pressure time stamp - 2nd sensor	323	posix time	30323	Long	
umtPrecipType	Precipitation Type	325	float	30325	Float	82
	Precipitation Type time stamp	327	posix time	30327	Long	
umtPressureTendency	Pressure Tendency	329	float	30329	Float	83
	Pressure Tendency time stamp	331	posix time	30331	Long	
umtSnowDepth	Snow Depth	333	float	30333	Float	84
	Snow Depth time stmap	335	posix time	30335	Long	
umtEvapotranspiration	Evapotranspiration	337	float	30337	Float	85
	Evapotranspiration time stamp	339	posix time	30339	Long	
umt2MinWindGustDir	2-min wind direction at max wind speed	341	float	30341	Float	86

	2-min wind direction at max wind speed time stamp	343	posix time	30343	Long	
umt2MinWindGustSpeed	2-min max wind speed	345	float	30345	Float	87
	2-min max wind speed time stamp	347	posix time	30347	Long	
umt2MinWindGustTime	Gust time stamp during the last 2 min	349	posix time	30349	Long	88
	Gust time stamp during the last 2 min time stamp	351	posix time	30351	Long	
umt2MinWindGustDir_2	2-min wind direction at max wind speed - 2nd sensor	353	float	30353	Float	89
	2-min wind direction at max wind speed time stamp - 2nd sensor	355	posix time	30355	Long	
umt2MinWindGustSpeed_2	2-min max wind speed - 2nd sensor	357	float	30357	Float	90
	2-min max wind speed time stamp- 2nd sensor	359	posix time	30359	Long	
umt2MinWindGustTime_2	Gust time stamp during the last 2 min - 2nd sensor	361	posix time	30361	Long	91
	Gust time stamp during the last 2 min time stamp - 2nd sensor	363	posix time	30363	Long	
umtVolts	Raw voltage (0-5)	365	float	30365	Float	92
	Raw voltage (0-5) time stamp	367	posix time	30367	Long	
umtVolts_2	Raw voltage (0-5) – 2 <sup>nd</sup> Sensor	369	float	30369	Float	93
	Raw voltage (0-5) time stamp – 2 <sup>nd</sup> Sensor	371	posix time	30371	Long	
umtUVRadiation	UV Radiation	373	float	30373	Float	94
	UV Radiation time stamp	375	posix time	30375	Long	
umtUVRadiation_2	UV Radiation – 2 <sup>nd</sup> Sensor	377	float	30377	Float	95
	UV Radiation time stamp – 2 <sup>nd</sup> Sensor	379	posix time	30379	long	
umtParticleConc (Dust Monitor)	Particle Concentration	381	float	30381	Float	96
	Particle Concentration time stamp	383	posix time	30383	long	
umtWaterLevel	Water Level	385	float	30385	Float	97
	Water Level time stamp	387	posix time	30387	long	
umtLongitude	Longitude	389	float	30389	Float	98
	Longitude time stamp	391	posix time	30391	long	
umtLatitude	Latitude	393	float	30393	Float	99
	Latitude time stamp	395	posix time	30395	long	
umtGpsElevation	GPS Elevation	397	float	30397	Float	100
	GPS Elevation time stamp	399	posix time	30399	long	
umtGpsSpeed	GPS Speed	401	float	30401	Float	101
	GPS Speed time stamp	403	posix time	30403	long	
umtGpsHeading	GPS Heading	405	float	30405	Float	102
	GPS Heading time stamp	407	posix time	30407	long	
umtCO2Concentration	CO2 Concentration	409	float	30409	Float	103
	CO2 Concentration time stamp	411	posix time	30411	long	
umtEvaporatorEff	Evaporator Efficiency	413	float	30413	Float	104
	Evaporator Efficiency time stamp	415	posix time	30415	long	
umtCompressorInletTemp	Compressor Inlet Temp	417	float	30417	Float	105
	Compressor Inlet Temp time stamp	419	posix time	30419	long	
umtPredictedGeneration	Predicted Generation	421	float	30421	Float	106
	Predicted Generation time stamp	423	posix time	30423	long	
umtCloudBase	Cloud Base (Height)	425	float	30425	Float	107
	Cloud Base time stamp	427	posix time	30427	long	
umt1MinRollAvgWindSpeed	1-min avg of wind speed	429	float	30429	Float	108
	1-min avg of wind speed time stamp	431	posix time	30431	long	
umt1MinRollAvgWindDir	1-min avg of wind direction	433	float	30433	Float	109
	1-min avg of wind direction time stamp	435	posix time	30435	long	

umt1MinSustWindSpeed	1-min sustained wind speed	437 float		30437	Float	110
	1-min sustained wind speed time stamp	439	posix time	30439	long	
umt1MinLightningEventCount	1-min Lightning Event Count	441 float		30441	Float	111
	1-min Lightning Event Count time stamp	443	posix time	30443	long	
umt30MinLightningEventCount	30-min Lightning Event Count	445 float		30445	Float	112
	30-min Lightning Event Count time stamp	447	posix time	30447	long	
umtUvIndex	UV Index	449 float		30449	Float	113
	UV Index time stamp	451	posix time	30451	long	
umtOverallAQI	Overall Air Quality Index	453 float		30453	Float	114
	Overall Air Quality Index time stamp	455	posix time	30455	long	
umtMainPollutant	Main Pollutant	457 float		30457	Float	115
	Main Pollutant time stamp	459	posix time	30459	long	
umtSensorStatus	Sensor Status AQM	461 float		30461	Float	116
	Sensor Status time stamp	463	posix time	30463	long	
umtSensorUptime (AQM400)	Sensor Uptime AQM	465 float		30465	Float	117
	Sensor Uptime time stamp	467	posix time	30467	long	
umtCarbonMonoxide	Carbon Monoxide	469 float		30469	Float	118
	Carbon Monoxide time stamp	471	posix time	30471	long	
umtCarbonMonoxide-8hrAvg (AQM400)	8-hour Avg of Carbon Monoxide	473 float		30473	Float	119
	8-hour Avg of Carbon Monoxide time stamp	475	posix time	30475	long	
umtNitrogenDioxide	Nitrogen Dioxide	477 float		30477	Float	120
	Nitrogen Dioxide time stamp	479	posix time	30479	long	
umtNitrogenDioxide-1hrAvg (AQM400)	1-hour Avg of Nitrogen Dioxide	481 float		30481	Float	121
	1-hour Avg of Nitrogen Dioxide time stamp	483	posix time	30483	long	
umtOzone	Ozone	485 float		30485	Float	122
	Ozone time stamp	487	posix time	30487	long	
umtOzone-1hrAvg (AQM400)	1-hour Avg of Ozone	489 float		30489	Float	123
	1-hour Avg of Ozone time stamp	491	posix time	30491	long	
umtOzone-8hrAvg (AQM400)	8-hour Avg of Ozone	493 float		30493	Float	124
	8-hour Avg of Ozone time stamp	495	posix time	30495	long	
umtNitricOxide (AQM530)	Nitric Oxide	497 float		30497	Float	125
	Nitric Oxide time stamp	499	posix time	30499	long	
umtSulfurDioxide (AQM400)	Sulfur Dioxide	497 float		30497	Float	125
	Sulfur Dioxide time stamp	499	posix time	30499	long	
umtSulfurDioxide-1hrAvg (AQM400)	1-hour Avg of Sulfur Dioxide	501 float		30501	Float	126
	1-hour Avg of Sulfur Dioxide time stamp	503	posix time	30503	long	
umtSulfurDioxide-24hrAvg (AQM400)	24-hour Avg of Sulfur Dioxide	505 float		30505	Float	127
	24-hour Avg of Sulfur Dioxide time stamp	507	posix time	30507	long	
umtPM10	PM 10	509 float		30509	Float	128
	PM 10 time stamp	511	posix time	30511	long	
umtPM10-24hrAvg (AQM400)	24-hour Avg of PM 10	513 float		30513	Float	129
	24-hour Avg of PM 10 time stamp	515	posix time	30515	long	
umtPM2pt5	PM 2.5	517 float		30517	Float	130
	PM 2.5 time stamp	519	posix time	30519	long	
umtPM2pt5-24hrAvg (AQM400)	24-hour Avg of PM 2.5	521 float		30521	Float	131
	24-hour Avg of PM 2.5 time stamp	523	posix time	30523	long	
umtStationPressure-1	Station Pressure 1	525 float		30525	Float	132

	Station Pressure 1 time stamp	527	posix time	30527	long	
umtStationPressure-2	Station Pressure 2	529	float	30529	Float	133
	Station Pressure 2 time stamp	531	posix time	30531	long	
umtPressureDelta	Pressure Delta	533	float	30533	Float	134
	Pressure Delta time stamp	535	posix time	30535	long	
umtQFE	QFE	537	float	30537	Float	135
	QFE time stamp	539	posix time	30539	long	
umtQNH	QNH	541	float	30541	Float	136
	QNH time stamp	543	posix time	30543	long	
umtFreezingRain	Freezing rain	545	float	30545	Float	137
	Freezing rain time stamp	547	posix time	30547	long	
umtIceSensorStatus	Ice sensor status	549	float	30549	Float	138
	Ice sensor status time stamp	551	posix time	30551	long	

**Notes:**

For each of the available measurements, the two registers immediately following the value contain the posix time value of the time that value was last updated. For example: the wind speed value is stored in registers 5 and 6. The last update timestamp is stored in registers 7 and 8 and is a 32-bit integer value.

The posix time values are 32-bit integers; All the values are Modbus input registers.

**16-Bit Registers**

**The 16-bit unsigned scaled integer registers**

Data type: Unsigned scaled integers

Parameter value = (unsigned 16-bit interger + Offset)/Factor

Measurement	Description	Register	Min	Max	factor	Offset
umtLastMeasTime		32001	na			
umtWindSpeed	Wind speed	32002	0	160	368	0
umtRawWindDir	Raw wind direction	32003	0	360	163	0
umtAdjWindDir	Adjusted wind direction	32004	0	360	163	0
umtRelHumidity	Relative humidity	32005	0	100	590	0
umtRawBaromPress	Raw barometric pressure	32006	15	35	2950	44250
umtAdjBaromPress,	Adjusted barometric pressure	32007	15	35	2950	44250
umtTrueNorthOffset		32008	na			
umtLastRain		32009	na			
umtTemp1	Temperature 1	32010	-70	160	256	-17920
umtWindChill	Wind chill	32011	-70	160	256	-17920
umtHeatIndex	Heat index	32012	-70	160	256	-17920
umtDewPoint	Dew point	32013	-70	160	256	-17920
umtDensityAltitude		32014	na			
umt3SecRollAvgWindSpeed	3-sec avg of wind speed	32015	0	160	368	0
umt3SecRollAvgWindDir	3-sec avg of wind direction	32016	0	360	163	0
umt2MinRollAvgWindSpeed	2-min avg of wind speed	32017	0	160	368	0
umt2MinRollAvgWindDir	2-min avg of adjusted wind direction	32018	0	360	163	0
umt10MinRollAvgWindSpeed	10-min avg of wind speed	32019	0	160	368	0
umt10MinRollAvgWindDir	10-min avg of adjusted wind direction	32020	0	360	163	0
umt10MinWindGustDir	10-min wind direction at max wind speed	32021	0	360	163	0

umt10MinWindGustSpeed	10-min max wind speed	32022	0	160	368	0
umt10MinWindGustTime		32023	na			
umt60MinWindGustDir	60-min wind direction at max wind speed	32024	0	360	163	0
umt60MinWindGustSpeed	60-min max wind speed	32025	0	160	368	0
umt60MinWindGustTime		32026	na			
umtRainToday	Rain for the day	32027	0	500	118	0
umtRainThisWeek	Rain for the week	32028	0	500	118	0
umtRainThisMonth	Rain for the month	32029	0	500	118	0
umtRainThisYear	Rain for the year	32030	0	500	118	0
umtRainRate	Rain rate	32031	0	20	2950	0
umtHailToday		32032	na			
umtLastHail		32033	na			
umtHailRate		32034	na			
umtWetBulbGlobeTemp	Wet bulb globe temperature	32035	-70	160	256	-17920
umtSaturatedVaporPressure		32036	na			
umtVaporPressure		32037	na			
umtDryAirPressure		32038	na			
umtDryAirDensity		32039	na			
umtAbsoluteHumidity		32040	na			
umtAirDensityRatio		32041	na			
umtAdjustedAltitude		32042	na			
umtSAECorrectionFactor		32043	na			
umtWetAirDensity		32044	na			
umtWetBulbTemp	Wet bulb Temperature	32045	-70	160	256	-17920
umtExtinctionCoefficient		32046	na			
umtVisibility		32047	na			
umtLux		32048	na			
umtDayNight		32049	na			
umtWindSpeed_2	Wind speed - 2nd sensor	32050	0	160	368	0
umtRawWindDir_2		32051	0	360	163	0
umt3SecRollAvgWindSpeed_2	3-sec avg of wind speed - 2nd sensor	32052	0	160	368	0
umt3SecRollAvgWindDir_2	3-sec avg of wind direction - 2nd sensor	32053	0	360	163	0
umt2MinRollAvgWindSpeed_2	2-min avg of wind speed - 2nd sensor	32054	0	160	368	0
umt2MinRollAvgWindDir_2	2-min avg of wind direction - 2nd sensor	32055	0	360	163	0
umt10MinRollAvgWindSpeed_2	10-min avg of wind speed - 2nd sensor	32056	0	160	368	0
umt10MinRollAvgWindDir_2	10-min avg of wind direction - 2nd sensor	32057	0	360	163	0
umt60MinWindGustDir_2	60-min wind direction at max wind speed - 2nd sensor	32058	0	360	163	0
umt60MinWindGustSpeed_2	60-min max wind speed - 2nd sensor	32059	0	160	368	0
umt60MinWindGustTime_2	Gust time stamp during the last 60 min - 2nd sensor	32060	na			
umt10MinWindGustDir_2	10-min wind direction at max wind speed - 2nd sensor	32061	0	360	163	0
umt10MinWindGustSpeed_2	10-min max wind speed - 2nd sensor	32062	0	160	368	0
umt10MinWindGustTime_2	Gust time stamp during the last 10 min - 2nd sensor	32063	na			
umtTemp2	Temperature 2	32064	-70	160	256	-17920
umtTemp3	Temperature 3	32065	-70	160	256	-17920
umtTemp4	Temperature 4	32066	-70	160	256	-17920
umtSolarRadiation	Solar Radiation	32067	0	2000	29	0
umtSolarRadiation_2	Solar Radiation 2	32068	0	2000	29	0



umtSolarRadiation_3	Solar Radiation 3	32069	0	2000	29	0
umtSolarRadiation_4	Solar Radiation 4	32070	0	2000	29	0
umtRainLastHr	Rain Last Hour	32071	0	40	1475	0
umtRainLastHr_2	Rain Last Hour - 2nd sensor	32072	0	40	1475	0
umtRainToday_2	Rain for the day - 2nd sensor	32073	0	500	118	0
umtRainThisWeek_2	Rain for the week - 2nd sensor	32074	0	500	118	0
umtRainThisMonth_2	Rain for the month - 2nd sensor	32075	0	500	118	0
umtRainThisYear_2	Rain for the year - 2nd sensor	32076	0	500	118	0
umtRainRate_2	Rain rate - 2nd sensor	32077	0	20	2950	0
umtPAR	PAR	32078	0	3000	19	0
umtPAR_2	PAR - 2nd sensor	32079	0	3000	19	0
umtRelHumidity_2	Relative Humidity - 2nd sensor	32080	0	100	590	0
umtRawBaromPress_2	Raw Barometric Pressure - 2nd sensor	32081	15	35	2950	44250
umtPrecipType	Precipitation Type	32082			1	0
umtPressureTendency	Pressure Tendency	32083	1	-1	1	0
umtSnowDepth	Snow Depth	32084	0	240	245	0
umtEvapotranspiration	Evaoptanspiration	32085	0	5	11800	5
umt2MinWindGustDir	2-min wind direction at max wind speed	32086	0	360	163	0
umt2MinWindGustSpeed	2-min max wind speed	32087	0	160	368	0
umt2MinWindGustTime	Gust time stamp during the last 2 min	32088 na				
umt2MinWindGustDir_2	2-min wind direction at max wind speed - 2nd sensor	32089	0	360	163	0
umt2MinWindGustSpeed_2	2-min max wind speed - 2nd sensor	32090	0	160	368	0
umt2MinWindGustTime_2	Gust time stamp during the last 2 min - 2nd sensor	32091 na				
umtVolts	Raw voltage	32092	0	5	11800	0
UmtVolts_2	Voltage 2	32093	0	5	11800	0
umtUVRadiation	UV Radiation	32094	0	3000	19	0
umtUVRadiation_2	UV Radiation – 2 <sup>nd</sup> Sensor	32095	0	3000	19	0
umtParticleConc	Particle Concentration	32096	0	120	491	0
umtWaterLevel	Water Level	32097	-1000	1000	29	-29000
umtLatitude	Latitude	32098	-90	90	327	-29430
umtLongitude	Longitude	32099	-180	180	163	-29340
umtGpsElevation	GPS Elevation	32100	-1000	40000	1	-1000
umtGpsSpeed	GPS Speed	32101	0	160	368	0
umtGpsHeading	GPS Heading	32102	0	360	163	0
umtCO2Concentration	CO2 Concentration	32103	0	10000	5	0
umtEvaporatorEff	Evaporator Efficiency	32104	0	1	59000	0
umtCompressorInletTemp	Compressor Inlet Temp	32105	-70	160	256	-17920
umtPredictedGeneration	Predicted Generation	32106	0	100	590	0