



Orion LX weather station with Modbus TCP/IP Slave Interface

[For easy 3rd party connectivity, contact us for a preconfigured Modbus OPC server (by Kepware) project]

All data accessed via (read only) Input Registers [Modbus Function Code 3]

Data type **Long** = Signed 32 bit value

Data type **Float** = 32 bit floating point value

Measurement	Description	Starting Modbus Offset	Columbia data type	Modbus Address	OPC data type
umtLastMeasTime	time of last measurement	1	posix time	30001	Long
	Last measurement time stamp	3	posix time	30003	Long
umtWindSpeed	Wind speed	5	float	30005	Float
	Wind speed time stamp	7	posix time	30007	Long
umtRawWindDir	Wind direction - unadjusted	9	float	30009	Float
	Wind direction - unadjusted time stamp	11	posix time	30011	Long
umtAdjWindDir	Wind direction	13	float	30013	Float
	Wind direction time stamp	15	posix time	30015	Long
umtRelHumidity	Relative humidity	17	float	30017	Float
	Relative humidity time stamp	19	posix time	30019	Long
umtRawBaromPress	Barometric pressure - unadjusted	21	float	30021	Float
	Barometric pressure - unadjusted time stamp	23	posix time	30023	Long
umtAdjBaromPress	Barometric pressure	25	float	30025	Float
	Barometric pressure time stamp	27	posix time	30027	Long
umtTrueNorthOffset	Electronics Compass wind direction offset	29	float	30029	Float
	Electronics Compass wind direction offset time stamp	31	posix time	30031	Long
umtLastRain	Last reported time of rainfall	33	float	30033	Float
	Last reported time of rainfall time stamp	35	posix time	30035	Long
umtTemp1	Air temperature	37	float	30037	Float
	Air temperature time stamp	39	posix time	30039	Long
umtWindChill	Wind chill	41	float	30041	Float

	Wind chill time stamp	43	posix time	30043	Long
umtHeatIndex	Heat index	45	float	30045	Float
	Heat index time stamp	47	posix time	30047	Long
umtDewPoint	Dew Point	49	float	30049	Float
	Dew Point time stamp	51	posix time	30051	Long
umtDensityAltitude	Density Altitude	53	float	30053	Float
	Density Altitude time stamp	55	posix time	30055	Long
umt3SecRollAvgWindSpeed	3-sec avg of wind speed	57	float	30057	Float
	3-sec avg of wind speed time stamp	59	posix time	30059	Long
umt3SecRollAvgWindDir	3-sec avg of wind direction	61	float	30061	Float
	3-sec avg of wind direction time stamp	63	posix time	30063	Long
umt2MinRollAvgWindSpeed	2-min avg of wind speed	65	float	30065	Float
	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
	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
	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
	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
	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
	10-min max wind speed time stamp	87	posix time	30087	Long
umt10MinWindGustTime	Time of 10-min max wind speed	89	posix time	30089	Long
	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
	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
	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
	Gust time stamp during the last 60 min time stamp	103	posix time	30103	Long
umtRainToday	Rain for the day	105	float	30105	Float
	Rain for the day time stamp	107	posix time	30107	Long
umtRainThisWeek	Rain for the week	109	float	30109	Float
	Rain for the week time stamp	111	posix time	30111	Long
umtRainThisMonth	Rain for the month	113	float	30113	Float
	Rain for the month time stamp	115	posix time	30115	Long

umtRainThisYear	Rain for the year	117	float	30117	Float
	Rain for the year time stamp	119	posix time	30119	Long
umtRainIntensity	Rain intensity	121	float	30121	Float
	Rain intensity time stamp	123	posix time	30123	Long
umtRainDuration	Rain duration	125	float	30125	Float
	Rain duration time stamp	127	posix time	30127	Long
umtHail	Hail accumulation	129	float	30129	Float
	Hail accumulation time stamp	131	posix time	30131	Long
umtHailDuration	Hail duration in seconds	133	float	30133	Float
	Hail duration time stamp	135	posix time	30135	Long
umtHailIntensity	Hail intensity	137	float	30137	Float
	Hail intensity time stamp	139	posix time	30139	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.