µWeather^{TM}

http://www.qth.com/RXcomm

Overview

µWeather^{TM} (MicroWeather) is an APRS-compatible weather station with the following features:

- Single-board weather station based on the 16F877 microcontroller
- On-board or remotable temperature/humidity/barometric pressure sensors
- Real-time clock for time-stamping APRS weather packets
- On-board generation of 1200 baud AFSK for APRS weather packets with **no TNC required** and standard 5-pin DIN receptacle for interfacing with radio
- Supports the Dallas Semiconductor 1-wire anemometer
- Weather data is also output in RS232 industry-standard format for compatibility with 3rd-party weather display software
- 20x4 character LCD for continuous display of current weather conditions
- Easy initial configuration performed through the µWeather^{TM}'s RS232 port with any standard terminal or terminal emulator software

µWeather^{TM} will key the radio and transmit time-stamped, APRS-formatted 1200 baud packet weather data at regular intervals. In addition, it will provide RS232 serial weather data at 2400 baud in industry-standard "datalogger" format for compatibility with 3rd-party weather display software.

Future expansion plans call for implementing a TTL rain gauge in the firmware for µWeather^{TM}. This upgrade will permit rain data to also be encoded in the weather packets transmitted by µWeather^{TM}. Progress on these plans will be announced on the project web page.

µWeather^{TM} was developed by David R. Andersen, K0RX. He may be reached at k0rx@qsl.net or on the APRS network.

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