![METER ENVIRONMENT logo]

Tech note: How integrators replace DS-2 with ATMOS 22

The ATMOS 22 with covered ultrasonic transducers has improved firmware and hardware components, and as a result, the ATMOS 22 anemometer output is different from the DS-2 anemometer. Integrators replacing a DS-2 with an ATMOS 22 on a third-party data acquisition system should review the summary changes below to ensure that correct data are collected. These instructions, along with information in the DS-2 Integrator Guide and ATMOS 22 Integrator Guide, will provide users with complete details.

SDI-12

- Change the array of 3 to an array of 4 for the M command, and declare a wind gust variable

- Change the array order for the M command (wind speed, wind direction, wind gust, air temperature)

- Using the M1 command, a second array of 3 can be used to get x and y orientation and compass heading (if the compass correction is enabled); declare new variables for each

- If using the M6 command, see M, M1, and R0 commands, or contact Customer Support

- If using the R command, the output order is different

- Because of the complexity of the ATMOS 22 internal measurement sequence, it should not be read more frequently than every 20 s

- If using the ATMOS 22 on a bus configuration, see **Sensor Bus Considerations** in the ATMOS 22 Integrator Guide for more information

DDI SERIAL

- The ATMOS 22 must be powered continuously

- DDI serial communication is not recommended