

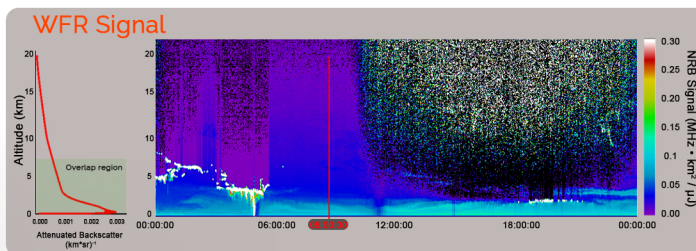
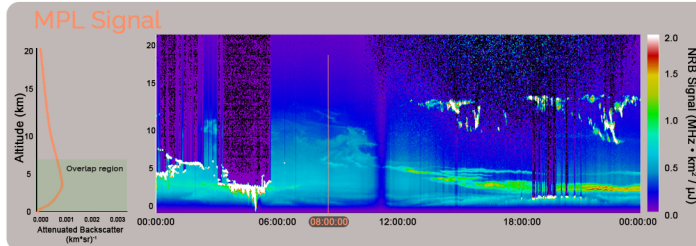
ETHER EMBEDDED

WIDE-FIELD RECEIVER (WFR)

SPEC SHEET



The WFR is an optional addition to the Model 4 MPL that allows overlap calibration of an already fielded instrument. A wider FOV receiver is bore-sighted to the MPL and collects the backscattered light from the



same transmitter, and is able to resolve signal within the MPL's overlap regime. By comparing the two signals, a simple scaler conversion can be generated to correct for these losses.

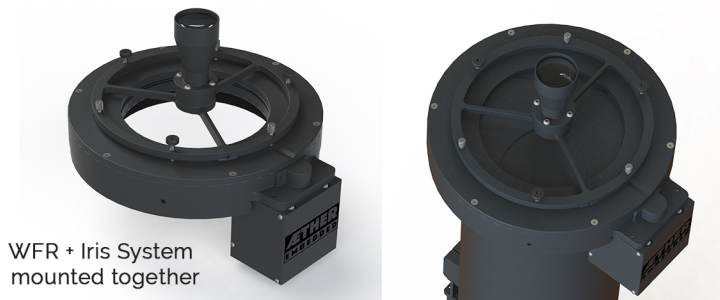
The WFR system runs continuously and does not affect the normal MPL data collection.

Opto-Mechanical Specifications:

- $\varnothing 50\text{mm}$ center-mounted receiver.
- Polarization insensitive for use with PMPLs.
- 1.4mRad field-of-view.
- 0.15nm FWHM spectral filtering
- $\leq 0.005^\circ$ boresight accuracy.
- Internal automatic shutter for sun protection.
- Fiber-coupled connection to external SPCM.
- Optional interface with MPL Iris System.
- Max range⁽¹⁾ 16km (nighttime), 4km (daytime).
- MPLNET approved design.
- Swappable between MPL systems⁽²⁾.




WFR receiver



WFR + Iris System mounted together

⁽¹⁾ Max range strongly dependent on MPL output energy and C-Value. Typical values given.

⁽²⁾ WFR system may be swapped between MPLs but requires a boresight alignment each time. Consult  for advice and information.