

The following items are required for the DISCOVER-AQ (Deriving Information on Surface Conditions from Column and Vertically Resolved Observations Relevant to Air Quality) project. To meet project requirements specifications are detailed. All items must be received and invoiced by 07/31/2013.

10 Air Quality Sensors

Specifications for sensors:

- Measure 5 species: CO, NO, NO₂, SO₂, and O₃
- Resolution for CO, NO, NO₂, SO₂, and O₃: better than 10 ppbv
- Other metrics measured: temperature, pressure, and relative humidity (minimum resolution 5-15 minutes)
- Operation lifetime: 12 months, unattended
- Data: Storage on-board as well as routine transmission
- Communications: Via GPRS network (not radio frequency) to allow routine sending and collection of data
- Weight: less than 5 kg
- Size: Suitable for attachment to existing street infrastructure (e.g. lighting rigs), not to exceed 20cm x 20 cm x 20cm
- Attachment: Secure installation to be simple and reversible (no long-term/permanent infrastructure)
- Weather-proof construction
- Sensors deployable as network to be inherently scalable

10 SIM Cards

Specification for cards:

- Must be compatible with sensors
- Data available in CSV format
- Provide 1 year of data storage/transmission