**Technická specifikace přístroje pro měření půdní respirace**

System for measurement of CO2 emission from soil in filed condition, independent on external power supply. Equipment should be widely used in scientific literature, please provide references to papers using this equipment in scientific journals reported in Web of Science. Equipment should meet following specifications:

CO2 non-dispersive infrared gas analyser

Measurement range: 0-20'000 ppm

Accuracy: 1.5% of reading calibration drift
Drift at 0 ppm: <0.15 ppm/°C
Span drift1: < 0.03 %/°C
Total drift at 370 ppm: <0.4 ppm/°C
RMS Noise at 370 ppm with 1 sec signal averaging: <1 ppm
Sensitivity to water vapor: < 0.1 ppm CO2/mmol/mol H2O

 H2O non-dispersive infrared gas analyser

Measurement Range: 0-80 mmol/mol
Accuracy: 1.5% of reading Calibration drift
Drift at 0 ppt: <0.003 mmol/mol/°C
Span Drift: <0.03 %/°C Total
Drift at 10 ppt: <0.009 mmol/mol/°C
RMS Noise at 10 ppt with 1 sec signal averaging: <0.01 mmol/mol
Sensitivity to CO2: <0.0001 mmol/mol H2O/ppm CO2

\* ATMOSPHERIC PRESSURE SENSOR
Measurement Range: 15-115 kPA
Accuracy: 1.5% over 0 to 85 °C

\* OPERATING RANGE
Temperature: ­20 °C to 45 °C
Relative Humidity: 0 to 95% RH, Non-Condensing

\* HOUSING:
Weatherproof Rating: Tested to IEC IP55 standard
Connections: Weatherproof connectors
\* No use of chemicals for operation

\* Unattended long term measurements in the field
\* Remote operation over Ethernet
\* Wireless operation

\* CHAMBERS:
Diameter: <= 20cm
Pressure Vent: wind speed and wind direction independent
Temperature: ­20 °C to 45 °C
Relative Humidity: 0 to 95% RH, non-Condensing