Indoor Rack

# Setup Procedure:

1. Fasten vertical riser with sampling inlet (inverted snorkel) to cabinet
   1. Connect thermocouple to logger via quick-connect
   2. Connect Licor LI-840A inlet tubing to PFA sample inlet
   3. Connect TSI DustTrak II inlet tubing to stainless steel sample inlet
2. Plug UPS into 120VAC power source
   1. Turn UPS on via front panel button
   2. Turn on power strip on cabinet floor
   3. Turn on netbook on cabinet floor
   4. *DustTrak II turns on automatically but must be turned off manually*
   5. *Dashboard computer turns on automatically but must be turned off manually*
3. Set Dylos DC1100 on top of cabinet exterior, plug into outlet and turn on
4. Set monitoring laptop on top of cabinet exterior, plug into outlet and turn on

# Takedown Procedure

Conduct setup procedure in reverse order.

# Datalogger Wiring

|  |  |  |  |
| --- | --- | --- | --- |
| **Device** | **Channel** | **Color** | **CR1000** |
| Thermocouple (Type K) | Temperature signal (+) | yellow | DF 8 H |
| Temperature signal (-) | red | DF 8 L |
| Area aerosol monitor  (DustTrak II; TSI) | PM signal | orange | DF 4 H |
| PM reference | brown | DF 4 L |
| shield | black | *earth* |
| Air quality monitor  (DC 1100; Dylos) | BT dongle Tx |  | C2 = Com1 Rx |
| BT dongle Vcc |  | 5V |
| BT dongle G |  | G |
| CO2/H2O analyzer  (LI-840A; LI-COR) | data receive | white | C3 = Com2 Tx |
| data transmit | brown | C4 = Com2 Rx |
| data ground | yellow | G |
| shield | bare | G |
| CO/NO/O3 sensors  (B4-series; Alphasense) | CO signal | green | DF 1 H |
| CO reference | green/white | DF 1 L |
| NO signal | blue | DF 2 H |
| NO reference | blue/white | DF 2 L |
| O3 signal | brown | DF 3 H |
| O3 reference | brown/white | DF 3 L |
| power | orange | 5V |
| ground | orange/white | G |