# Datalogger

|  |  |  |  |
| --- | --- | --- | --- |
| **Device** | **Channel** | **Color** | **CR1000X** |
| D1  Fine-wire thermocouple (optional) | Signal | purple | DF 1 H |
| Ground | red | DF 1 L |
| Shield | clear | ⏚ |
| D2  Fine-wire thermocouple (optional) | Signal | purple | DF 2 H |
| Ground | red | DF 2 L |
| Shield | clear | ⏚ |
| D3  Fine-wire thermocouple (optional) | Signal | purple | DF 3 H |
| Ground | red | DF 3 L |
| Shield | clear | ⏚ |
| D4  Fine-wire thermocouple (optional) | Signal | purple | DF 4 H |
| Ground | red | DF 4 L |
| Shield | clear | ⏚ |
| D5  Fine-wire thermocouple (optional) | Signal | purple | DF 5 H |
| Ground | red | DF 5 L |
| Shield | clear | ⏚ |
| D2  IRGA control box (LI-7550) | SDM data/C1 | blue | DIN rail terminals to C5 |
| SDM clock/C2 | white | DIN rail terminals to C6 |
| SDM enable/C3 | brown | DIN rail terminals to C7 |
| SDM ground | black | DIN rail terminals to G |
| earth ground | bare | DIN rail terminals to G |
| power +12v | red | *Ext. power supply +12V* |
| power ground | black | *Ext. power supply ground* |
| D1 & D2  Sonic anemometers (CSAT3B) | SDM data/C1 | white | DIN rail terminals to C5 |
| SDM clock/C2 | yellow | DIN rail terminals to C6 |
| SDM enable/C3 | blue | DIN rail terminals to C7 |
| SDM ground | brown | DIN rail terminals to G |
| earth ground | clear | DIN rail terminals to G |
| power +12v | red | *+12V DIN rail terminals* |
| power ground | black | *Ground DIN rail terminals* |
| D3/4/5  Daisy-chained SDM cable | SDM data/C1 | orange | DIN rail terminals to C5 |
| SDM clock/C2 | green | DIN rail terminals to C6 |
| SDM enable/C3 | red | DIN rail terminals to C7 |
| SDM ground | black | DIN rail terminals to G |
| earth ground | DIN rail terminals to G |
| power +12v | clear | *Ext. power supply +12V* |
| power ground | black | *Ext. power supply ground* |
| Garmin GPS | Pulse-per-second (PPS) | gray | C1 |
| Serial transmit | white | C2 |
| Serial receive | blue | G |
| Serial ground | black | G |
| Enable | yellow | G |
| Shield | clear | G |
| +12V power | red | 12V |

# Power supply on tower D2

|  |  |
| --- | --- |
| Line (black) | Heavy duty extension cord plugged into outlet on tall tower |
| Neutral (white) |
| Earth (green) |
| +12Vdc | Datalogger enclosure circuit breaker (+) terminal |
| Daisy chained power cable (clear) |
|  |
| DC ground | Datalogger enclosure ground terminal |
| Daisy chained power cable (black) |
|  |

# Daisy chained SDM/power cables

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **CSAT3B sonic** | **LI7500 IRGA** | **LI-7550 IRGA** | **SDM cable** | **Power cable** |
| SDM data/C1 | white | gray | blue | orange | - |
| SDM clock/C2 | yellow | blue | white | green | - |
| SDM enable/C3 | blue | brown | brown | red | - |
| SDM ground | brown | black | black | black | - |
| earth ground | clear | white | bare | - |
| power +12v | red | red/white | red | - | clear\* |
| power ground | black | green | black | - | black\* |
| \*IRGA on tower D3 & D5 use separate power supply | | | | | |