

Caterpillar EMCP 4 / 4.x Install Guide



1. Unpack Components

- Unpack the monitor, antenna, and data and power cable.
- Inspect all components to ensure there is no shipping damage.

2. Installing Antenna

- Place the antenna vertically at the center of the roof of the generator.
- Route the antenna cable into the area of the generator control.
- Ensure a drip loop lower than the monitor to prevent water from running down the antenna cable into the monitor connection.

3. Attach the Antenna Cable:

- Attach the antenna cable to the front of the monitor and tighten thumb tight.

4. Attaching the Monitor.

- Attach the monitor via its magnetic feet, on top of the engine controller or another appropriate location.

- Horizontal surfaces are best, but the unit may be mounted vertically or even upside down if necessary.

*Note: If mounted vertically, install the monitor with the cables down to prevent water from entering the enclosure.

5. Connect the Monitor:

- The monitor can connect to the EMCP 4 controller via a 2-wire (RS485) Modbus connection.

6. Utilize Modbus Capabilities:

- Connect the OMN white (Data+) and green (Data-) wires to Modbus + and Modbus -*
- Set up controller communications port to Baud Rate 9600, parity none, Slave ID 1.

7. Power On and Check LEDs:

- confirm that the LEDs light up and blink.
- If not, check for power wires at the battery. (Scan QR code for light sequence)

8. Confirm Installation:

- Allow 15 minutes for the monitor to log into the network. Call OmniMetrix at 770-209-0012 to confirm installation.





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CAT EMCP 4 / 4.x Wiring Diagram				
SLEEVE COLOR	OMNI WIRE	FUNCTION	TERMINATION	
Ded	Red	Power In (9-30Vdc)	Battery +	
Red	Black	Ground	Battery -	
Dhua	White	White Modbus Data + Modbus	Modbus +	
Blue	Green	Modbus Data -	Modbus -	

If you are unable to locate Modbus + and Modbus - you will need to find Pin 3 and 5 on the 72-Pin connector box. Trace the Pins to the terminal board and connect according to wiring diagram.

Pin #	Name	Description	
3	MB-	RS-485 differential inverting line (Rx/Tx-) (A)	
4	MB-REF	RS-485 reference signal	
5	MB+	RS-485 differential non-inverting line (Rx/Tx+) (B)	



If you have any questions, please call OmniMetrix Tech Support at 770-209-0012 or email at techsupport@omnimetrix.net

