My node cannot connect to others

Work through these checks in order.

1. **Verify antenna is connected.** Most common cause. Never transmit without an antenna attached - it can permanently damage the radio's power amplifier (the PA, the transmit chip).
2. **Verify modem preset matches.** Two nodes on different presets are invisible to each other. On Meshtastic, check the Meshtastic app - Radio Config - LoRa - Modem Preset; on MeshCore, check the radio/preset settings in the MeshCore app. Ask your local community which preset they use.
3. **Verify channel name and PSK match.** Wrong credentials mean your messages are encrypted to a key nobody else has. Verify against local network documentation.
4. **Verify frequency band.** US/Canada = 915 MHz hardware. EU = 868 MHz hardware. These cannot interoperate. Many AliExpress boards ship as 868 MHz by default.
5. **Check if other nodes are in range.** Meshtastic users: visit meshmap.net to see nearby nodes. MeshCore users: use the MeshCore map at map.meshcore.io. In rural areas you may genuinely be out of range.
6. **Verify the radio is transmitting.** Check for LoRa init errors in the serial console. A working node shows increasing packet counts in the app.
7. **Factory reset and reconfigure.** If all else fails, reset and start configuration fresh.

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