

High Power Attenuator & Load Operating Guidelines & Precautions

⚡ POWER & THERMAL

• Operate at 50–70% of rated power for continuous use >15 min • For pulsed signals, verify peak power (pulse width & duty cycle) with sufficient margin • Watch for simultaneous fundamental + 3rd harmonic signals causing excess power	• For conduction-cooled: ensure flat, clean mounting surface in full contact • Monitor case temp below 85°C, use heat sinks or forced-air cooling if needed • For air-cooled: keep fan running, clean dust in fans regularly
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🔧 CONNECTION & TORQUE

• Check connectors before mating: no dust, no deformed center pins, no damaged threads • Always recommended to connect via RF cables. Hard-mating may cause connector misalignment and micro-displacement leading to poor contact, arcing	• Always use a torque wrench. Hand tightening alone is insufficient • Min. bend radius: observe cable spec. Never fold or kink cables. • Do NOT use the attenuator body as a support for cable weight (critical for high-power units) • Keep at least 5 cm clearance around for ventilation
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🔌 POWER-UP PROCEDURE

• Before power-on: confirm all connections torqued with wrench • Always measure signal power before connecting the attenuator • Maintain system impedance matching to minimize VSWR. Avoid high-reflection environments	• Always connect per input/output markings • Avoid cold-start with full power, start with low-level, ramp up gradually (suggest +20% each step, observe 5 min per step) • Before disconnecting: turn off ALL power (RF + DC) first
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☑ PRE-USE CHECKLIST

☐ Signal power measured ☐ Connector faces clean, no damage ☐ Cables correctly connected ☐ Torque wrench used, all connectors properly tightened	☐ Adequate ventilation clearance or derating ☐ Keep away from flammable materials ☐ First power-up: starting from low power, ramping up gradually
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Case will become HOT during operation. Do NOT touch with bare hands.