



rf/microwave instrumentation

Operating and Service Manual

DC4260

Model

10026788

Part Number

Serial Number

OPERATING INSTRUCTIONS

MODEL DC4260 DIRECTIONAL COUPLER



CAUTION:
Do not obstruct air holes on sides. Physical location must be such that air can flow through unit.



WARNING:
Do not exceed maximum power ratings. Do not drop. Internal components are fragile.

Refer to drawing 10026789 at the end of this section for dimensions and connector locations.

Operation of the Model DC4260 is quite simple. The input signal is fed into the jack (J1) marked **INPUT** and the output is taken from the jack (J2) marked **OUTPUT**. The input and output jacks on the unit are Type EIA, 3-1/8 inch fixed flanges (Male).

Forward coupled output is taken from the jack (J3) marked **FWD**, and Reverse coupled output is taken from the jack (J4) marked **REV**. Both coupled output jacks on the unit are Type N (Female).

See Specification Sheet for detailed specification.

DC4260 Dual Directional Coupler

- 20,000 Watts CW
- 10kHz–250MHz

Features

AR RF/Microwave Instrumentation's Model DC4260 is a high power, ultra-broadband coupler with excellent performance characteristics over a range of four decades. This Dual Directional Coupler is a convenient means of simultaneously monitoring forward and reverse power in high power systems using normal laboratory oscilloscopes, voltmeters, power meters and spectrum analyzers. The Model DC4260 is recommended for use with our "A" series amplifiers, and other amplifiers operating within the frequency and power range, and our PM2003 Power Meter.

The export classification for this equipment is EAR99. These commodities, technology or software are controlled for export in accordance with the U.S. Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

Specifications

FREQUENCY RANGE: 10kHz–250MHz

POWER (Maximum): 20kW CW

COUPLING FACTOR: 60dB

COUPLING FLATNESS: ± 2 dB

DIRECTIVITY: Typical, 25dB; Minimum, 20dB

INSERTION LOSS: 0.1 dB maximum

IMPEDANCE (Main Line): 50 ohms, VSWR 1.25:1 maximum

CONNECTORS: Main Line, Type EIA fixed flanges, 3-1/8" male; Coupled, Type N female

PRIMARY POWER: 2 120VAC fans

WEIGHT: 7.9 kg (17.5 lbs)

SIZE (W x H x D): 25.4 x 25.4 x 23 cm (10 x 10 x 9 in)

AR RF/Microwave
Instrumentation
160 School House Rd
Souderton, PA 18964
215-723-8181

For an applications engineer call: 800.933.8181

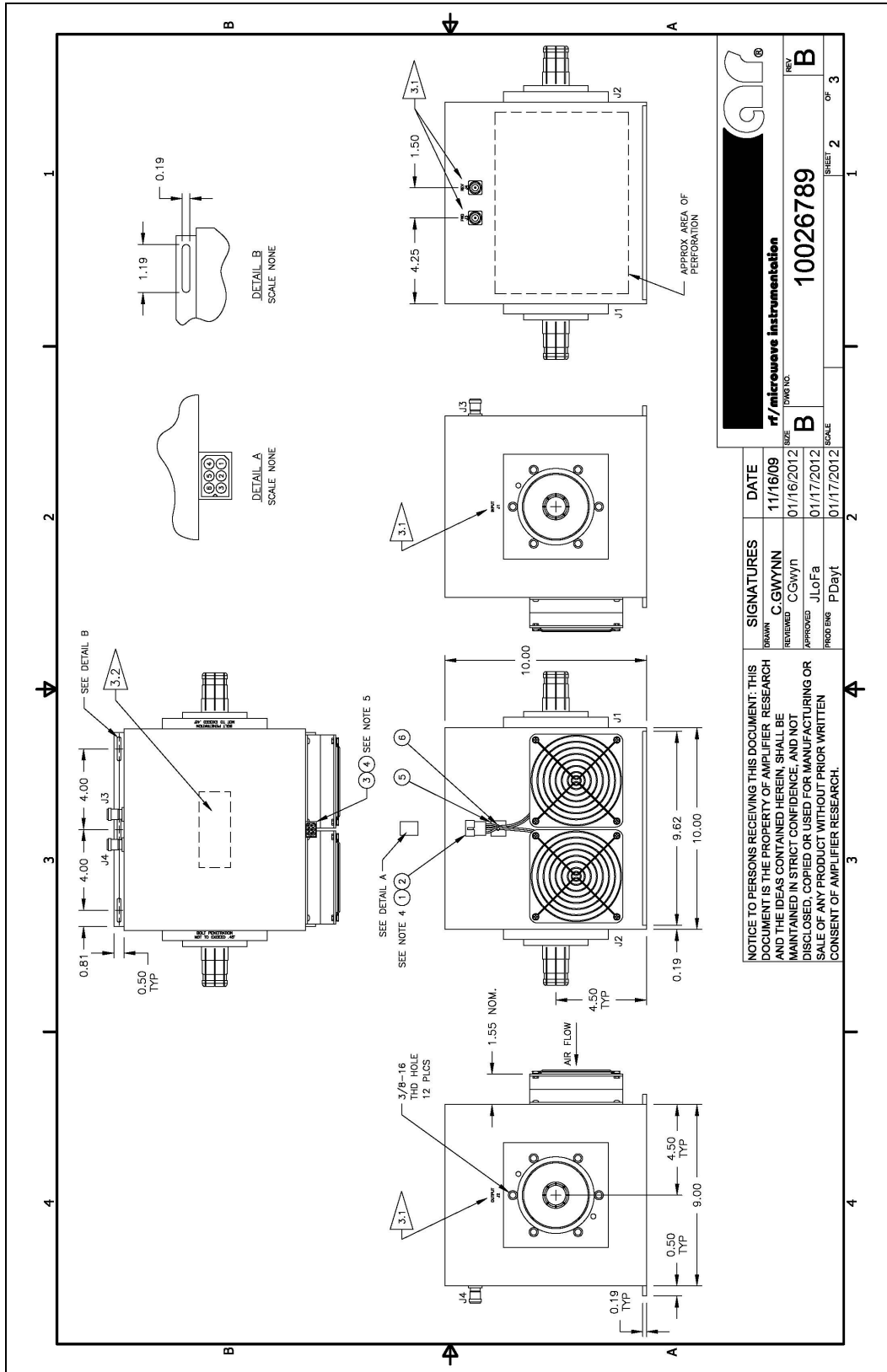
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To order AR Products, call 215.723.8181. For an applications engineer call: 800.933.8181. Direct to Service call: 215.723.0275 or email: service@arworld.us For Faxing Orders: 866.859.0582 (Orders Only Please) info@arworld.us

Approved for public release by AR RF/Microwave Instrumentation

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DRAWING NO. 10026789		REV B	
DATE 11/16/09		DATE 01/16/2012	
SIGNATURES DRAWN C.GWYNN		REVIEWED C.GWYNN	
APPROVED J.LoFa		APPROVED J.LoFa	
PROJ. ENG. P.Dajyt		PROJ. ENG. P.Dajyt	
SCALE 1		SCALE 2	
SHEET 2		SHEET 2	
OF 3		OF 3	

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WARRANTIES: LIMITATION OF LIABILITY

Seller warrants (i) that seller has title to the goods sold and (ii) that Amplifiers (all parts excluding traveling wave and vacuum tubes), Antennas, field monitors, field probes, field analyzers, field analyzer processor units, system controllers, system interlock, power meters, leak detectors, RF conducted probes, RF conducted clamps, Multi-tone, EMI receiver systems, RF down converters, RF conducted immunity systems, conducted immunity accessories, radiated immunity test systems, safety meters, safety sensor heads, tripods, directional couplers, waveguide adapters, termination loads, load attenuators, impedance stabilization networks, and coaxial cables will be free from defects in material and workmanship for a period of three (3) years from date of shipment shown on AR RF/Microwave Instrumentation invoice.

All modules, used in the amplifiers for the 1-6 GHz, 4-18 GHz, 6-18 GHz, all HPM products, and other applications, are hermetically-sealed. This sealing process protects the internal hybrid circuitry from humidity that could compromise the long term reliability of the product. These modules are not field-repairable and should *never* be opened outside of AR's Microelectronics Lab. The modules in these product lines have a security label on two sides of the modules between the housing and lid/cover. If the security label is removed and or cut, the warranty of the module will be voided.

Vacuum tubes in the 'L' series amplifiers, traveling-wave tubes in TWT amplifiers, and power heads will be free from defects in material and workmanship for a period of one (1) year.

Contact AR RF/Microwave Instrumentation for warranty information regarding items not listed.

Seller's sole responsibility in fulfilling these warranties shall be to repair or replace any goods which do not conform to the foregoing warranties or, at seller's option, to give buyer credit for defective goods. The warranty is valid only when used in the country specified at time of order. Warranty service must be obtained from the repair facility designated at that time. If warranty service is not available in the country where the equipment is to be used, it must be returned to AR RF/Microwave Instrumentation. Warranty service will be provided only for defective goods which are returned within the warranty period, freight costs prepaid to AR RF/Microwave Instrumentation or its designated repair facility.

There are no other warranties, express or implied, including any warranty of merchantability or fitness. Seller shall not be responsible for any incidental or consequential damages arising from any breach of warranty.

No person other than an officer of Amplifier Research Corporation, has any authority to bind seller to any affirmation, representation or warranty except as specifically included in the preceding terms and conditions.

