

ARTISAN®
TECHNOLOGY GROUP

Your **definitive** source for quality pre-owned equipment.

Artisan Technology Group
(217) 352-9330 | sales@artisantg.com | artisantg.com

Full-service, independent repair center
with experienced engineers and technicians on staff.

We buy your excess, underutilized, and idle equipment
along with credit for buybacks and trade-ins.

Custom engineering
so your equipment works exactly as you specify.

- Critical and expedited services
- In stock / Ready-to-ship
- Leasing / Rentals / Demos
- ITAR-certified secure asset solutions

Expert team | Trust guarantee | 100% satisfaction

All trademarks, brand names, and brands appearing herein are the property of their respective owners.

Visit our website - *Click HERE*

DIRECTIONAL COUPLERS

CTM-M-G SERIES

Microwave Solutions

TECHNICAL FEATURE

FEATURES

- 0.5 - 18 GHz
- 6, 10 & 20 dB Coupling
- Multi-Octave Bands
- Stripline Construction
- 50 W Power Handling
- SMA Connectors

PRINCIPAL SPECIFICATIONS

Model Number	Frequency Range GHz	Coupling¤ dB Nom.	Frequency Sensitivity, dB, Nom.	Directivity, dB, Min.	*Insertion Loss, dB Max.	VSWR Max. Main Line	VSWR Max. Coupled Line	Outline Ref Dim.
CTM-6M-1.25G	0.5 - 2.0	6 ± 1.0	± 0.75	23	0.35	1.20:1	1.20:1	1
CTM-10M-1.25G		10 ± 1.0	± 0.75	23	0.35	1.20:1	1.20:1	2
CTM-20M-1.25G		20 ± 1.0	± 0.75	23	0.35	1.20:1	1.20:1	2
CTM-6M-2.5G	1.0 - 4.0	6 ± 1.0	± 0.50	23	0.45	1.20:1	1.20:1	3
CTM-10M-2.5G		10 ± 1.0	± 0.50	23	0.35	1.20:1	1.20:1	3
CTM-20M-2.5G		20 ± 1.0	± 0.50	23	0.40	1.20:1	1.20:1	4
	2.0 - 8.0							
CTM-6M-5G		6 ± 1.0	± 0.30	20	0.50	1.25:1	1.25:1	5
CTM-10M-5G		10 ± 1.0	± 0.40	20	0.35	1.25:1	1.25:1	5
CTM-20M-5G		20 ± 1.0	± 0.40	20	0.40	1.25:1	1.25:1	6
	4.0 - 12.4							
CTM-10M-8G		10 ± 1.0	± 0.40	17	0.50	1.30:1	1.30:1	7
CTM-20M-8G		20 ± 1.0	± 0.40	17	0.50	1.30:1	1.30:1	8
	7.0 - 18.0							
CTM-10M-12G	6.0 - 18.0	10 ± 1.25	± 0.75	15	0.60	1.35:1	1.40:1	9
CTM-20M-12G		20 ± 1.25	± 0.60	15	0.60	1.35:1	1.40:1	9

¤Coupling is referenced to the input

*Insertion Loss above Coupling Loss

POWER SPECIFICATIONS

Coupled Power "Loss":		
	6 dB units:	1.25 dB
	10 dB units:	0.46 dB
	20 dB units:	0.044 dB
Peak Power:		3 kW max.
CW Input Power (Forward):		50 Watts max.
Reflected Power:	6 dB units:	2 Watts max.
	10 dB units:	5 Watts max.
	20 dB units:	50 Watts max.

GENERAL SPECIFICATIONS

Impedance:	50 Ω nom.
Operating Temp.:	-55°to +85°C
SMA Connectors:	Female, to meet the interface requirements of MIL-PRF-39012
Other Connectors:	TNC and N type optionally available. Inquire at factory.

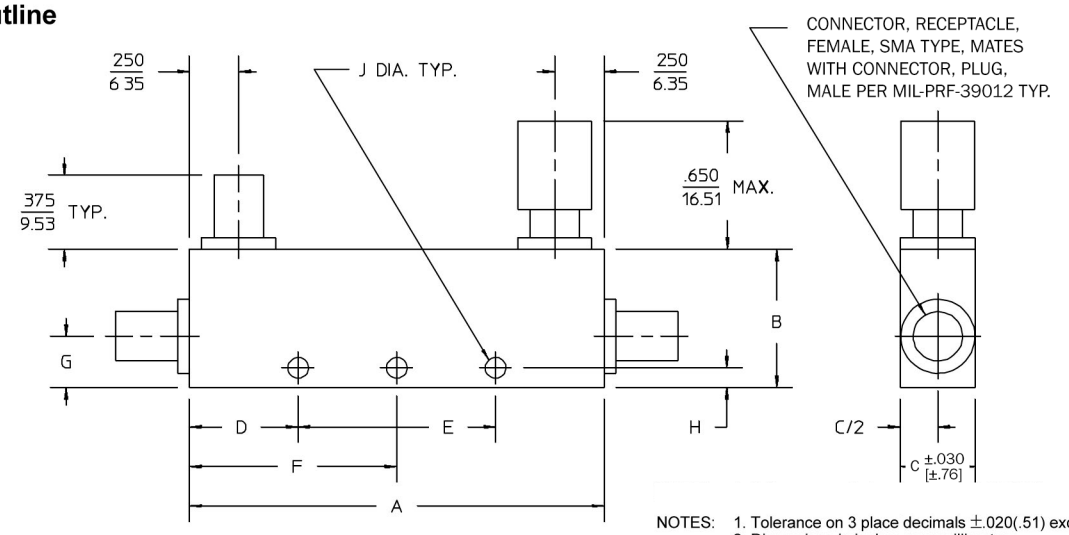
Microwave Solutions

Merrimac Industries
41 Fairfield Place,
West Caldwell, NJ 07006

+ 1 973-575-1300, 191309
info@craneae.com
www.craneae.com

DS_Directional Couplers_CTM_M_G_12192022.indd. This revision supersedes all previous releases. All technical information is believed to be accurate, but no responsibility is assumed for errors. We reserve the right to make changes in products or specifications without notice. Copyright © 2022 Crane Electronics, Inc. All rights reserved.

Package Outline



NOTES: 1. Tolerance on 3 place decimals ±.020(.51) except as noted.
2. Dimensions in inches over millimeters.
3. Weights are nominal on all outlines.

OUTLINE	A	B	C	D	E	F	G	H	J	WT. OZ. (G)
1	3.600 91.44	.530 13.46	.380 9.65	.500 12.70	2.600 66.04	—	.220 5.59	.075 1.91	.105 2.67	1.41 (40)
2	3.600 91.44	.600 15.24	.380 9.65	.500 12.70	2.600 66.04	—	.220 5.59	.075 1.91	.105 2.67	1.59 (45)
3	2.900 73.66	.680 17.27	.380 9.65	.450 11.43	2.000 50.80	—	.340 8.64	.150 3.81	.149 3.78	1.45 (41)
4	2.900 73.66	.600 15.24	.380 9.65	.450 11.43	2.000 50.80	—	.220 5.59	.075 1.91	.105 2.67	1.41 (40)
5	1.780 45.21	.680 17.27	.380 9.65	.450 11.43	.875 22.23	—	.340 8.64	.150 3.81	.149 3.78	1.02 (29)
6	1.880 47.75	.600 15.24	.380 9.65	.440 11.18	1.000 25.40	—	.220 5.59	.075 1.91	.105 2.67	1.02 (29)
7	1.220 30.99	.550 13.97	.380 9.65	.420 10.67	.375 9.53	—	.220 5.59	.075 1.91	.105 2.67	.78 (22)
8	1.220 30.99	.600 15.24	.380 9.65	.420 10.67	.375 9.53	—	.220 5.59	.075 1.91	.105 2.67	.85 (24)
9	1.000 25.40	.500 12.70	.380 9.65	—	—	.500 12.70	.220 5.59	.075 1.91	.105 2.67	.67 (19)

General Notes:

1. The CTM series directional couplers are miniature three port devices utilizing stripline technology in a connectorized package. Each is a multi-section quarter wave coupler designed to cover a broad bandwidth. They are ideally suited to monitor forward or reflected power with minimal perturbation to the main line signal, signal sampling, control loops and test signal injection devices in BITE.

2. A variety of models may be custom ordered with coupling values up to 30 dB and covering frequency bands up to 18 GHz.

3. These units comply with MIL-DTL-15370 and may be supplied screened for compliance with additional specifications you designate for military and space applications requiring the highest reliability.

16Aug99

Artisan Technology Group is an independent supplier of quality pre-owned equipment

Gold-standard solutions

Extend the life of your critical industrial, commercial, and military systems with our superior service and support.

We buy equipment

Planning to upgrade your current equipment? Have surplus equipment taking up shelf space? We'll give it a new home.

Learn more!

Visit us at **artisantg.com** for more info on price quotes, drivers, technical specifications, manuals, and documentation.

Artisan Scientific Corporation dba Artisan Technology Group is not an affiliate, representative, or authorized distributor for any manufacturer listed herein.

We're here to make your life easier. How can we help you today?

(217) 352-9330 | sales@artisantg.com | artisantg.com

ARTISAN® TECHNOLOGY GROUP