

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.

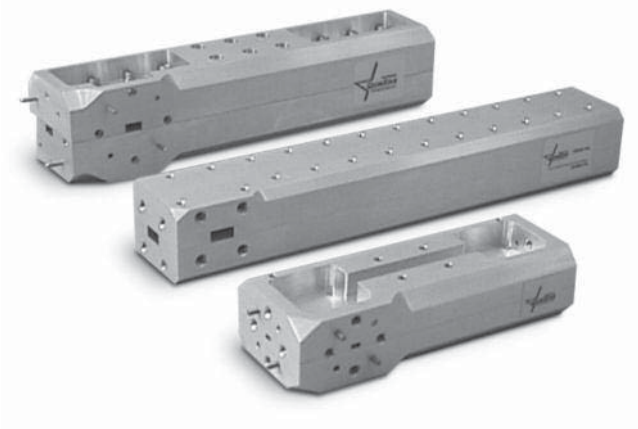
Visit our website - *Click HERE*

Precision High Directivity Couplers

QJR

Characteristics

- Fullband Coverage
- Excellent Coupling Flatness and Accuracy
- Low VSWR
- Very High Directivity



Product Description

QuinStar Technology's **QJR** series **precision high directivity couplers** cover the frequency range of 18 to 170 GHz in nine waveguide bands. They are available in 3 port configuration with coupling values of 3, 6, 10, 20, 30 and 40 dB. They are constructed with a rugged splitblock mechanical design for long-lasting durability to maintain their coupling value.

Precision high directivity directional couplers are ideal devices for sampling or inserting RF energy in a waveguide transmission line without affecting the transmitting signal. They prove especially useful in applications such as RF power and signal reflection measurements in test systems. The superior directivity, insertion loss, coupling flatness and accuracy also make these directional couplers useful for a wide range of laboratory requirements and subsystem applications. In addition to the standard three-port directional couplers, QuinStar offers custom four-port directional couplers. See series QJB couplers.

Specifications

FREQUENCY BAND	K	Ka	Q	U	V	E	W	F	D
Frequency Range (GHz)	18-26.5	26.5-40	33-50	40-60	50-75	60-90	75-110	90-140	110-170
Waveguide Size	WR-42	WR-28	WR-22	WR-19	WR-15	WR-12	WR-10	WR-8	WR-6
Coupling Values (dB at center frequency)	3, 6, 10, 20, 30 and 40 (± 1)								
Coupling Flatness (±dB typ)	0.7	0.7	0.7	0.7	0.7	0.8	0.8	1.0	1.0
Directivity (dB typ) [1, 3]	37	37	37	37	35	35	35	30	28
Insertion Loss (dB max) [2]	0.7	0.7	0.7	0.7	0.8	1.0	1.2	2.0	2.5
VSWR, Main Line (typ)	1.1:1	1.1:1	1.1:1	1.1:1	1.1:1	1.1:1	1.1:1	1.15:1	1.15:1
VSWR, Secondary Line (typ)	1.1:1	1.1:1	1.1:1	1.1:1	1.1:1	1.15:1	1.15:1	1.2:1	1.21:1

Other waveguide sizes are available.

[1] Directivity is the difference between power levels at the coupled port when input and output ports are interchanged.

[2] Insertion loss is defined as the power loss in excess of the loss due to coupling.

[3] For 30 dB and 40 dB couplers: directivity = 25 dB typ.

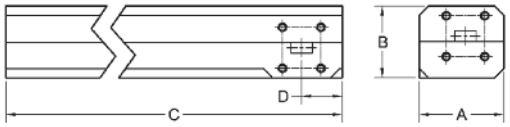
Made in USA

24085 Garnier Street, Torrance, CA 90505 ❖ (310) 320-1111 Fax: (310) 320-9968 ❖ sales@quinstar.com ❖ www.quinstar.com

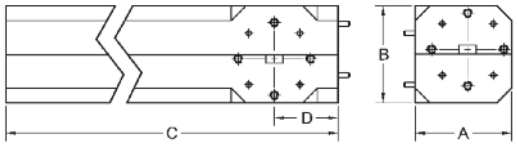
QUINSTAR TECHNOLOGY, INC.

Precision High Directivity Couplers
QJR

Outline Drawings/Mechanical Specifications



WR-42 and WR-28



WR-22 through WR-6

FREQ. BAND	WAVEGUIDE SIZE	FLANGE PATTERN	OUTLINE DIMENSIONS, inches/mm			
			A	B	C	D
K	WR-42	UG-595/U	1.40/35.6	1.06/26.9	9.25/234.9	0.60/15.2
Ka	WR-28	UG-599/U	1.10/27.9	0.90/22.8	6.25/158.7	0.60/15.2
Q	WR-22	UG-383/U	1.36/34.5	1.248/31.7	5.50/139.7	0.80/20.3
U	WR-19	UG-383/U	1.36/34.5	1.248/31.7	5.50/139.7	0.80/20.3
V	WR-15	UG-385/U	1.10/27.9	0.83/21.0	4.0/101.6	0.60/15.2
E	WR-12	UG-387/U	1.10/27.9	0.817/20.7	3.5/88.9	0.60/15.2
W	WR-10	UG-387/U	1.10/27.9	0.81/20.6	3.25/82.6	0.60/15.2
F	WR-8	UG-387/U	1.10/27.9	0.80/20.3	3.0/76.2	0.60/15.2
D	WR-6	UG-387/U	1.10/27.9	0.80/20.3	3.0/76.2	0.60/15.2

Ordering Information

Model Number **QJR -** **A BC D 00**

waveguide band designator
- K = K-band
- A = Ka-band
- Q = Q-band
- U = U-band
- V = V-band
- E = E-band
- W = W-band
- F = F-band
- D = D-band

flange type
- R = round flange
- S = square flange

coupling value in dB
- 03, 06, 10, 20, 30 or 40

Made in USA

24085 Garnier Street, Torrance, CA 90505 ❖ (310) 320-1111 Fax: (310) 320-9968 ❖ sales@quinstar.com ❖ www.quinstar.com

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