

RTIQ SERIES **I/Q Detectors**

The RTIQ Series of I/Q detectors was developed by RTI to measure the amplitude and phase of an IF input signal relative to a fixed level (Ref) signal.

Key Features

• 10-350MHz Frequency Range



General Specifications

| Required Reference Signal | Input Level: +13 ±1dBm | | |
|---------------------------|------------------------------|--|--|
| Max. Ev Input Level | (for 1dB saturation): +13dBm | | |
| Source Impedance | 50 Ohms | | |
| Video Load Impedance | 75 Ohms | | |
| Gain (K) | $3.5 \pm .35V$ | | |
| Dynamic Range | -20 to 0dBm | | |
| Power Requirements | ± 15VDC | | |
| Connectors | SMA | | |

Design Note: Radar Technology can customize any of our products to meet your individual system requirements. RTI also offers many form, fit, function replacements to old RHG Electronics Amplifiers.

Optional Specifications

| Power Supplies | ±12V DC (add suffix C) | | |
|-------------------|------------------------|--|--|
| Temperature Range | -30 to +71° C | | |

Specification Table

| Model | Center Frequency (MHz) | Information Bandwidth (MHz) | Accuracy Bandwidth (MHz) | Settling Time (uS) | Angular Accuracy (Deg.) |
|------------|---------------------------|--------------------------------|-----------------------------|-----------------------|----------------------------|
| RTIQ-3010 | 30 | 10 | 2 | 0.1 | ±5 |
| RTIQ-6020 | 60 | 20 | 4 | 0.08 | ±5 |
| RTIQ-7020 | 70 | 20 | 4 | 0.08 | ±5 |
| RTIQ-16020 | 160 | 20 | 4 | 0.08 | ±5 |
| RTIQ-35020 | 350 | 20 | 6 | 0.05 | ±5 |

*Parameters can be modified to meet specific application requirements

Outline Drawing





