



FEATURES

- Connects Up to Four Antennas to 12 Receivers
- 20 to 1200 MHz Extended Frequency Range
- Manual Control or Computer Control Option
- 70 dB Reverse Isolation
- Small Size

DESCRIPTION

The Model 6855 Matrix Multicoupler is an RF matrix switch covering the frequency range from 20 to 1200 MHz which permits the arbitrary connection of twelve receivers to four antennas. The unit can be controlled via the front panel or, optionally, by either IEEE-488 or RS-232C inputs. When the Model 6855 is used as an element of the Model 685A Receiver system, it provides automatic antenna selection for master-slave hand-off. The unit's design is based upon Reaction Instruments' fieldproven Model 414 VHF/UHF Multicoupler.

The Model 6855 is housed in a convenient 3-1/2 inches high standard EIA 19-inch rack-mount chassis. Exceptional EMI/RFI integrity is provided.

SPECIFICATIONS

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| Frequency Range | 20 to 1100 MHz—Standard 20 to 1200 MHz—Optional |
| Number of Inputs | Four |
| Number of Outputs | 12 |
| Impedance - Input and Output | 50 ohms |
| VSWR | 2.5:1, maximum |
| Gain | 2.5 dB, nominal |
| Gain Flatness | ±2.5 dB |
| Reverse Isolation | 70 dB |
| Output-Output Isolation | 30 dB |
| 2nd Order Input Intercept Point¹ | 30 dBm |
| 3rd Order Input Intercept Point¹ | 15 dBm |
| Input for 1 dB Gain Compression | 0 dBm |

¹Referred to output

Specifications are subject to change without notice.

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| Noise Figure | 9 dB, typical; 10 dB, maximum |
| Switch Type | Coaxial relay |
| Switching Time | 200 ms |
| Controls - Front Panel | Input-Output Selection |
| - Rear Panel | IEEE-488 - Optional RS-232C - Optional |
| Indicators | Eight-character alpha-numeric LED's |
| Power | 115 Vac, 60 Hz, 60 W, nominal - standard 220 Vac, 50 Hz - Optional |
| Temperature - Operating | 0° to 50° C |
| Style | EIA Standard Chassis, 3-1/2 inches high, 20 inches deep, suitable for 19-inch rack mounting |
| Weight | 35 lbs. |

ORDERING INFORMATION

A Model 6855 Matrix Multicoupler provides a frequency range of 20-1100 MHz, manual control, four inputs and twelve outputs. When ordering, please specify:

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|-------------------|---|
| 6855 | Matrix Multicoupler |
| Option I20 | RS-232C Control Interface (not available with Option I30) |

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| Option I30 | IEEE-488 Control Interface (not available with Option I20) |
| Option R01 | Extended Frequency (to 1200 MHz) |

WARRANTY

All of Reaction Instruments' equipment is warranted for one year, except for damage caused by accident or misuse, provided the equipment is returned for repair to the plant in Herndon, VA

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DECEMBER 1988