

# TRANSMITTER COMBINERS

## VHF 134 - 225 MHz

### ELECTRICAL SPECIFICATIONS

|                          |                                    |                                    |                                    |                                    |                                    |                                    |
|--------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Model Number             | 24321                              | 24341                              | 24421                              | 24422                              | 24441                              | 24442                              |
| Frequency Band (MHz)     | 134-225                            | 134-225                            | 134-225                            | 134-225                            | 134-225                            | 134-225                            |
| # of Channels            | 2                                  | 4                                  | 2                                  | 2                                  | 4                                  | 4                                  |
| Max. Pwr Per Channel     | 20 W                               | 20 W                               | 50 W                               | 50 W                               | 50 W                               | 50 W                               |
| Insertion Loss           | 3.7 dB                             | 6.8 dB                             | 3.7 dB                             | 4.0 dB                             | 6.8 dB                             | 100 dB                             |
| Isolation Tx/Tx          | 65 dB                              | 65 dB                              | 65 dB                              | 100 dB                             | 65 dB                              | 100 dB                             |
| Isolation Ant/Tx         | 35+ dB                             | 35+ dB                             | 35+ dB                             | 70+ dB                             | 35+ dB                             | 70+ dB                             |
| Impedance                | 50 Ω                               | 50 Ω                               | 50 Ω                               | 50 Ω                               | 50 Ω                               | 50 Ω                               |
| Max. VSWR Input / Output | 1.1:1 / 1.3:1                      | 1.1:1 / 1.3:1                      | 1.1:1 / 1.3:1                      | 1.1:1 / 1.3:1                      | 1.1:1 / 1.3:1                      | 1.1:1 / 1.3:1                      |
| Isolator                 | Single                             | Single                             | Single                             | Dual                               | Single                             | Dual                               |
| Temperature Range        | - 22 to +140 °F<br>- 30 to +60 ° C | - 22 to +140 °F<br>- 30 to +60 ° C | - 22 to +140 °F<br>- 30 to +60 ° C | - 22 to +140 °F<br>- 30 to +60 ° C | - 22 to +140 °F<br>- 30 to +60 ° C | - 22 to +140 °F<br>- 30 to +60 ° C |
| List Price               | \$1,440.00                         | \$2,380.00                         | \$1,735.00                         | \$2,350.00                         | \$3,970.00                         | \$5,190.00                         |

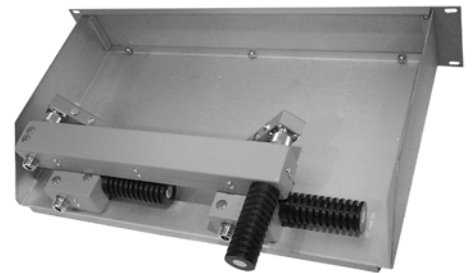
### MECHANICAL SPECIFICATIONS

|                          |                  |                                       |                                       |                                       |                                       |   |   |
|--------------------------|------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---|---|
| Dimensions<br>(HxWxD)    | Inches<br>Metric | 1 3/4 x 19 x 11 1/4<br>45 x 483 x 286 | 3 1/2 x 19 x 14 1/2<br>89 x 483 x 369 | 3 1/2 x 19 x 14 1/2<br>89 x 483 x 369 | 3 1/2 x 19 x 14 1/2<br>89 x 483 x 369 | 10 1/2 x 19 x 14 1/2<br>267 x 483 x 369 | 10 1/2 x 19 x 14 1/2<br>267 x 483 x 369 |
| Required Rack Units      |                  | 2                                     | 2                                     | 2                                     | 2                                     | 6                                       | 6                                       |
| Connectors               |                  | N Female                              | N Female                              | N Female                              | N Female                              | N Female                                | N Female                                |
| Finish                   |                  | EMR Gray                              | EMR Gray                              | EMR Gray                              | EMR Gray                              | EMR Gray                                | EMR Gray                                |
| Ship Weight: lbs.<br>kg. |                  | 18<br>8.2                             | 26<br>11.8                            | 18<br>8.2                             | 22<br>10.0                            | 26<br>11.8                              | 28<br>12.8                              |

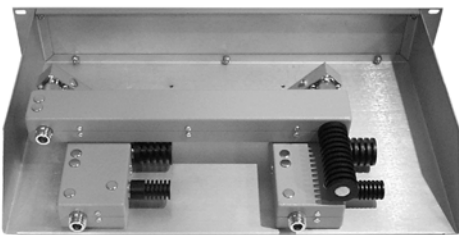
24321



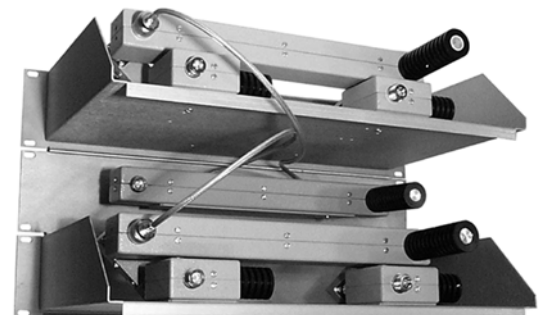
24421



24422



24441



# TRANSMITTER COMBINERS

## VHF 134 - 225 MHz

HYBRID FERRITE

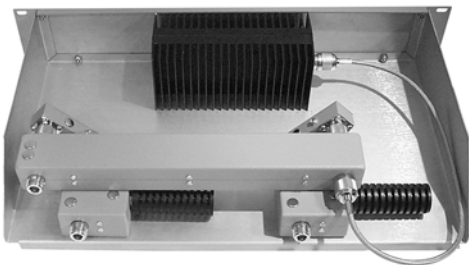
### ELECTRICAL SPECIFICATIONS

|                          |                                   |                                   |                                   |                                   |                                   |                                   |
|--------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| Model Number             | 24521                             | 24522                             | 24541                             | 24542                             | 24621/HF                          | 24622/HF                          |
| Frequency Band (MHz)     | 134-225                           | 134-225                           | 134-225                           | 134-225                           | 134-225                           | 134-225                           |
| # of Channels            | 2                                 | 2                                 | 4                                 | 4                                 | 2                                 | 2                                 |
| Max. Pwr Per Channel     | 125 W                             | 125 W                             | 125 W                             | 125 W                             | 250 W                             | 250 W                             |
| Insertion Loss           | 3.7 dB                            | 4.0 dB                            | 6.8 dB                            | 7.0 dB                            | 3.7 dB                            | 4.0 dB                            |
| Isolation Tx/Tx          | 65 dB                             | 100 dB                            | 65 dB                             | 100 dB                            | 65 dB                             | 100 dB                            |
| Isolation Ant/Tx         | 35+ dB                            | 70+ dB                            | 35+ dB                            | 70+ dB                            | 35+ dB                            | 70+ dB                            |
| Impedance                | 50 Ω                              | 50 Ω                              | 50 Ω                              | 50 Ω                              | 50 Ω                              | 50 Ω                              |
| Max. VSWR Input / Output | 1.1:1 / 1.3:1                     | 1.1:1 / 1.3:1                     | 1.1:1 / 1.3:1                     | 1.1:1 / 1.3:1                     | 1.1:1 / 1.3:1                     | 1.1:1 / 1.3:1                     |
| Isolator                 | Single                            | Dual                              | Single                            | Dual                              | Single                            | Dual                              |
| Temperature Range        | - 22 to +140 °F<br>- 30 to +60 °C | - 22 to +140 °F<br>- 30 to +60 °C | - 22 to +140 °F<br>- 30 to +60 °C | - 22 to +140 °F<br>- 30 to +60 °C | - 22 to +140 °F<br>- 30 to +60 °C | - 22 to +140 °F<br>- 30 to +60 °C |
| List Price               | \$2,045.00                        | \$2,745.00                        | \$4,715.00                        | \$6,120.00                        | \$5,810.00                        | \$6,075.00                        |

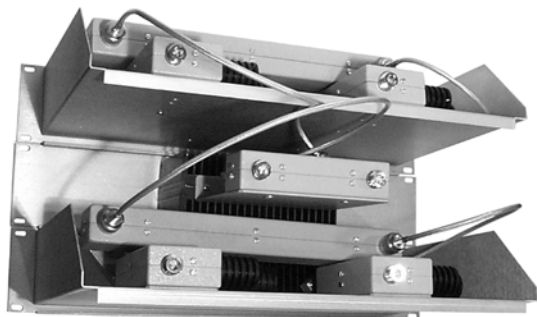
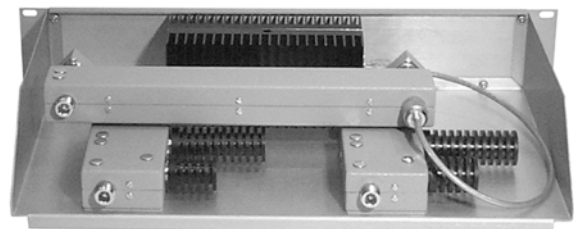
### MECHANICAL SPECIFICATIONS

|                          |                  |                                       |                                       |   |   |                                 |                                 |
|--------------------------|------------------|---------------------------------------|---------------------------------------|---|---|---------------------------------|---------------------------------|
| Dimensions (HxWxD)       | Inches<br>Metric | 3 1/2 x 19 x 14 1/2<br>89 x 483 x 369 | 3 1/2 x 19 x 14 1/2<br>89 x 483 x 369 | 10 1/2 x 19 x 14 1/2<br>267 x 483 x 369 | 10 1/2 x 19 x 14 1/2<br>267 x 483 x 369 | 14 x 19 x 17<br>356 x 483 x 432 | 14 x 19 x 17<br>356 x 483 x 432 |
| Required Rack Units      |                  | 2                                     | 2                                     | 6                                       | 6                                       | 5                               | 5                               |
| Connectors               |                  | N Female                              | N Female                              | N Female                                | N Female                                | N Female                        | N Female                        |
| Finish                   |                  | EMR Gray                              | EMR Gray                              | EMR Gray                                | EMR Gray                                | EMR Gray                        | EMR Gray                        |
| Ship Weight: lbs.<br>kg. |                  | 18<br>8.2                             | 22<br>10.0                            | 26<br>11.8                              | 28<br>12.8                              | 25<br>11.4                      | 29<br>13.2                      |

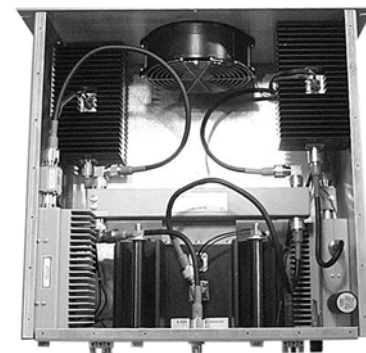
24521



24522



24542



24622/HF