

# AMPLIFICATEURS DE PUISSANCE

## Power amplifiers



5-43-45



40-28-10



38-40-30



M.3,5-50-140

### CARACTÉRISTIQUES GÉNÉRALES

- **IMPÉDANCE**  
ENTRÉE-SORTIE : 50 Ohms.
- **LARGEUR DE BANDE** : Octave, multi-octave.
- **GAIN** : Ondulation de la bande :  $\pm 1$  dB, sauf cas particuliers.
- **PUISSANCE** : A 1 dB de compression du gain.
- **ROS** : Valeur max. entrée et sortie, protection sur ROS infini pour tous les modèles.
- **TENSION DE SORTIE** : A la compression à 1 dB, exprimée en Volts crête sur 50 Ohms.
- **ALIMENTATION** : Tension (+ Volts) / Courant (mA) ou réseau alternatif. Valeur standard, tension continue modifiable pour une série uniquement.
- **BOITIER** : Modules connectés ou coffret laboratoire.
- **TEMPÉRATURE** : Spécifications à + 25° C ambiante.
- **UTILISATION** : Modules : - 20° + 55° C  
Coffrets : 0° + 45° C.

### OPTIONS

- Coffret Laboratoire, alimentation en 220/240 V 50/60 Hz.
- Module spécial (quantité minimum, nous consulter).
- Contrôle de gain électronique.
- Environnement militaire.
- Spécifications à la demande (nous consulter).
- Interface GPIB ou RS232.

### GENERAL CHARACTERISTICS

- **IMPEDANCE**  
INPUT-OUTPUT : 50 Ohms.
- **BANDWIDTH** : Octave, multi-octave.
- **GAIN** : Flatness in freq. band :  $\pm 1$  dB, except when specified.
- **POWER** : At 1 dB gain compression.
- **V.S.W.R.** : Max. input-output value, protection for infinite V.S.W.R. for all models.
- **OUTPUT VOLTAGE** : At 1 dB gain compression, in Volts peak on 50 Ohms.
- **POWER SUPPLY** : Voltage (+ Volts) / current (mA). Standard value. D.C. voltage modification : for series only.
- **CASE STYLE** : Connectorized modules or laboratory cabinets.
- **TEMPERATURE** : Specifications at + 25° C ambient.
- **USING** : Modules : - 20° + 55° C  
Lab. cabinet : 0° + 45° C.

### OPTIONS

- Laboratory cabinet, main power supply in 220/240 V (or 110 V) 50/60 Hz.
- Special module (minimum quantity, consult factory).
- Electronic gain control.
- Military environment.
- Special requirements (consult factory).
- IEEE 488 or RS232 interface.

# AMPLIFICATEURS DE PUISSANCE

## Power amplifiers

| Référence<br>Reference | Fréquence<br>Frequency range<br>MHz | Puissance  |                | Classe<br>Class | Gain<br>Gain<br>dB | F.B.<br>N.F.<br>dB | I.P.3<br>IP3<br>dBm | R.O.S.<br>V.S.W.R. | Tension<br>V Out<br>Volts | Boîtier<br>Case |         | Alimentation<br>supply<br>Volts/Amp. |
|------------------------|-------------------------------------|------------|----------------|-----------------|--------------------|--------------------|---------------------|--------------------|---------------------------|-----------------|---------|--------------------------------------|
|                        |                                     | O/P<br>dBm | Power<br>Watts |                 |                    |                    |                     |                    |                           | Module          | Coffret |                                      |
| <b>5 MHz</b>           |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 005.40.70A             | 0,5 - 5                             | 47         | 50             | AB              | 40                 | 7                  |                     | 1,5                | 70                        |                 | CLR3U   |                                      |
| <b>6 MHz</b>           |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 006.50.200             | 2 - 6                               | 56         | 400            | AB              | 50                 | 10                 |                     | 1,5                | 200                       |                 | CL6U    |                                      |
| <b>10 MHz</b>          |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 01.40.70A              | 0,001 - 10                          | 47         | 50             | AB              | 40                 | 10                 |                     | 2                  | 70                        |                 | CL4U    |                                      |
| <b>30 MHz</b>          |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 03.40.300              | 10 - 30                             | 59         | 800            | AB              | 40                 | 10                 |                     | 2                  | 300                       |                 | B9U     |                                      |
| 03.50.300              | 2 - 30                              | 60         | 1000           | AB              | 50                 | 10                 |                     | 2,5                | 300                       |                 | B9U     |                                      |
| <b>32 MHz</b>          |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 03.40.30A              | 0,01 - 32                           | 40         | 10             | AB              | 40                 | 10                 |                     | 2                  | 30                        |                 | CLR3U   |                                      |
| 03.40.50A              | 0,01 - 32                           | 44         | 25             | AB              | 40                 | 6                  |                     | 2                  | 45                        |                 | CLR4U   |                                      |
| 03.50.70A              | 0,01 - 32                           | 47         | 50             | AB              | 50                 | 6                  |                     | 2                  | 70                        |                 | CLR4U   |                                      |
| 03.50.100A             | 0,01 - 32                           | 50         | 100            | AB              | 50                 | 10                 |                     | 2                  | 100                       |                 | CLR4U   |                                      |
| 03.50.140A             | 0,01 - 32                           | 53         | 200            | AB              | 50                 | 10                 |                     | 2                  | 140                       |                 | CL6U    |                                      |
| 03.45.220              | 2 - 32                              | 57         | 500            | AB              | 45                 | 10                 |                     | 2                  | 220                       |                 | CLR6U   |                                      |
| <b>50 MHz</b>          |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 05.40.30A              | 0,1 - 50                            | 40         | 10             | A               | 40                 | 10                 | 48                  | 2                  | 30                        |                 | CL4U    |                                      |
| 05.40.45               | 1 - 50                              | 43         | 20             | A               | 40                 | 10                 | 51                  | 2                  | 45                        |                 | CL4U    |                                      |
| <b>60 MHz</b>          |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 06.50.320              | 1 - 60                              | 60         | 1000           | AB              | 50                 | 10                 |                     | 2                  | 320                       |                 | B12U    |                                      |
| <b>80 MHz</b>          |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 08.30.30A              | 0,150 - 80                          | 40         | 10             | A               | 30                 | 10                 | 48                  | 2                  | 30                        |                 | CLR3U   |                                      |
| 08.40.50A              | 0,150 - 80                          | 44         | 25             | AB              | 40                 | 10                 |                     | 2                  | 50                        |                 | CLR4U   |                                      |
| 08.40.70A              | 0,150 - 80                          | 47         | 50             | AB              | 40                 | 10                 |                     | 2                  | 70                        |                 | CLR4U   |                                      |
| 08.40.100A             | 0,150 - 80                          | 50         | 100            | AB              | 40                 | 10                 |                     | 2                  | 100                       |                 | CL6U    |                                      |
| 08.50.120A             | 0,150 - 80                          | 52         | 150            | AB              | 50                 | 12                 |                     | 2                  | 120                       |                 | CL6U    |                                      |
| 08.50.320A             | 0,2 - 80                            | 60         | 1000           | AB              | 50                 | 12                 |                     | 2                  | 320                       |                 | B12U    |                                      |
| <b>100 MHz</b>         |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 1.14.50A               | 0,1 - 100                           | 44         | 25             | A               | 14                 | 12                 | 52                  | 2,5                | 50                        |                 | CLR4U   |                                      |
| 1.10.70A               | 0,1 - 100                           | 47         | 50             | AB              | 10                 | 12                 |                     | 2,5                | 70                        |                 | CL4U    |                                      |
| 1.45.140               | 1 - 100                             | 53         | 200            | AB              | 45                 | 12                 |                     | 1,5                | 140                       |                 | CL6U    |                                      |
| <b>110 MHz</b>         |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 1.40.50                | 2 - 110                             | 44         | 25             | A               | 40                 | 8                  | 52                  | 2                  | 50                        |                 | CL4U    |                                      |
| 1.40.70                | 2 - 110                             | 47         | 50             | A               | 40                 | 8                  | 55                  | 2,5                | 70                        |                 | CL4U    |                                      |
| 1.40.100               | 2 - 110                             | 50         | 100            | A               | 40                 | 8                  | 58                  | 2,5                | 100                       |                 | CL4U    |                                      |
| <b>150 MHz</b>         |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 1.36.22                | 1 - 150                             | 37         | 5              | A               | 36                 | 7                  | 47                  | 2                  | 22                        | BM8             | CT3     | 24 / 1,5                             |
| <b>200 MHz</b>         |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 2.30.22A               | 0,1 - 200                           | 37         | 5              | A               | 30                 | 10                 | 47                  | 2                  | 22                        | BM10            | CT3     | 24 / 1,5                             |
| <b>220 MHz</b>         |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 2.45.70                | 0,1 - 220                           | 47         | 50             | A               | 45                 | 10                 | 55                  | 2                  | 70                        |                 | CLR4U   |                                      |
| <b>230 MHz</b>         |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 2.30.30A               | 0,150 - 230                         | 40         | 10             | A               | 30                 | 10                 | 49                  | 2                  | 30                        | BM10            | CT3     |                                      |
| 2.40.50A               | 0,150 - 230                         | 44         | 25             | AB              | 40                 | 10                 |                     | 2                  | 50                        |                 | CLR3U   |                                      |
| 2.40.70A               | 0,150 - 230                         | 47         | 50             | AB              | 40                 | 10                 |                     | 2                  | 70                        |                 | CLR4U   |                                      |
| 2.40.100A              | 0,150 - 230                         | 50         | 100            | AB              | 40                 | 10                 |                     | 2                  | 100                       |                 | CLR4U   |                                      |
| <b>250 MHz</b>         |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 2.10.30                | 1 - 250                             | 40         | 10             | A               | 10                 | 10                 | 48                  | 2,5                | 30                        | BM10            | CLR3U   | 24 / 2,5                             |
| 2.36.50                | 2 - 250                             | 44         | 25             | A               | 36                 | 10                 | 52                  | 2                  | 50                        |                 | CL4U    |                                      |
| 2.40.70                | 2 - 250                             | 47         | 50             | A               | 40                 | 11                 | 67                  | 2                  | 70                        |                 | CL4U    |                                      |
| 2.46.100               | 2 - 250                             | 50         | 100            | A               | 46                 | 10                 | 58                  | 2                  | 100                       |                 | CL6U    |                                      |
| <b>300 MHz</b>         |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 3.37.15A               | 0,150 - 300                         | 34         | 2,5            | A               | 37                 | 10                 | 44                  | 2                  | 15                        | BM10            | CT3     | 24 / 1,3                             |
| 3.30.30A               | 0,1 - 300                           | 39         | 8              | A               | 30                 | 12                 | 47                  | 2,5                | 30                        |                 | CL3U    |                                      |
| <b>352 MHz</b>         |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M3,5.50.140            | 352 ± 2                             | 53         | 200            | AB              | 50                 | 12                 |                     | 2                  | 140                       |                 | CLR4U   |                                      |
| <b>400 MHz</b>         |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 4.30.30A               | 0,150 - 400                         | 40         | 10             | AB              | 30                 | 10                 |                     | 2                  | 30                        |                 | CLR3U   |                                      |
| 4.40.45A               | 0,150 - 400                         | 43         | 20             | AB              | 40                 | 10                 |                     | 2                  | 45                        |                 | CLR3U   |                                      |
| 4.60.60A               | 0,150 - 400                         | 46         | 40             | AB              | 60                 | 10                 |                     | 2                  | 60                        |                 | CLR3U   |                                      |
| 4.46.70                | 20 - 400                            | 47         | 50             | AB              | 46                 | 10                 |                     | 2                  | 70                        |                 | CLR4U   |                                      |
| M4.35.50               | 200 - 400                           | 44         | 25             | A               | 35                 | 10                 | 52                  | 2                  | 50                        |                 | CL4U    |                                      |
| M4.40.100              | 100 - 400                           | 50         | 100            | AB              | 40                 | 10                 |                     | 2                  | 100                       |                 | CL6U    |                                      |

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| Référence<br>Reference | Fréquence<br>Frequency range<br>MHz | Puissance  |                | Classe<br>Class | Gain<br>Gain<br>dB | F.B.<br>N.F.<br>dB | I.P.3<br>IP3<br>dBm | R.O.S.<br>V.S.W.R. | Tension<br>V Out<br>Volts | Boîtier<br>Case |         | Alimentation<br>supply<br>Volts/Amp. |
|------------------------|-------------------------------------|------------|----------------|-----------------|--------------------|--------------------|---------------------|--------------------|---------------------------|-----------------|---------|--------------------------------------|
|                        |                                     | O/P<br>dBm | Power<br>Watts |                 |                    |                    |                     |                    |                           | Module          | Coffret |                                      |
| <b>500 MHz</b>         |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 5.16.10A               | 0,1 - 500                           | 30         | 1              | A               | 16                 | 10                 | 41                  | 2                  | 10                        | BM2             | CT2     | 24 / 0,5                             |
| 5.36.10A               | 0,1 - 500                           | 30         | 1              | A               | 36                 | 6                  | 38                  | 2                  | 10                        | BM2             | CT2     | 24 / 0,6                             |
| 5.30.20A               | 0,1 - 500                           | 36         | 4              | A               | 30                 | 10                 | 44                  | 2                  | 20                        | BM8             | CT3     | 24 / 1,5                             |
| 5.30.22                | 1 - 500                             | 37         | 5              | A               | 30                 | 10                 | 45                  | 2                  | 22                        | BM8             | CT3     | 24 / 1,5                             |
| 5.40.30A               | 1 - 500                             | 40         | 10             | A               | 40                 | 10                 | 48                  | 2                  | 30                        |                 | CLR4U   |                                      |
| 5.43.45                | 1 - 500                             | 43         | 20             | A               | 43                 | 10                 | 51                  | 2                  | 45                        |                 | CLR4U   |                                      |
| 5.43.55                | 1 - 500                             | 45         | 30             | AB              | 43                 | 10                 | 53                  |                    | 55                        |                 | CLR4U   |                                      |
| 5.40.30                | 10 - 500                            | 40         | 10             | A               | 40                 | 10                 | 49                  | 2,5                | 30                        |                 | CLR4U   |                                      |
| 5.46.70                | 50 - 500                            | 47         | 50             | AB              | 46                 | 10                 |                     | 2                  | 70                        |                 | CLR4U   |                                      |
| 5.50.100               | 150 - 500                           | 50         | 100            | AB              | 50                 | 10                 |                     | 2                  | 100                       |                 | CLR4U   |                                      |
| M.5.57.225             | 200 - 500                           | 57         | 500            | AB              | 57                 | 12                 |                     | 2                  | 225                       |                 | B14U    |                                      |
| M.5.40.70              | 250 - 500                           | 47         | 50             | A               | 40                 | 10                 | 55                  | 2                  | 70                        |                 | CLR4U   |                                      |
| M.5.50.100             | 250 - 500                           | 50         | 100            | AB              | 50                 | 10                 |                     | 2                  | 100                       |                 | CLR4U   |                                      |
| M.5.50.320             | 250 - 500                           | 60         | 1000           | AB              | 50                 | 12                 |                     | 2                  | 320                       |                 | B30U    |                                      |
| <b>1000 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 10.30.10A              | 0,1 - 1000                          | 30         | 1              | A               | 30                 | 10                 | 39                  | 2                  | 10                        | BM2             | CT0     | 24 / 0,75                            |
| 10.40.100 A2B          | 0,1 - 230<br>200 - 1000             | 50<br>45   | 100<br>30      | AB<br>AB        | 40<br>40           | 10<br>10           |                     | 2<br>2             | 100<br>55                 |                 | CLR3U   |                                      |
| 10.25.10M              | 10 - 1000                           | 30         | 1              | A               | 25                 | 10                 | 39                  | 2                  | 10                        | BM2             | CT0     | 15 / 0,8                             |
| 10.36.10M              | 10 - 1000                           | 30         | 1              | A               | 36                 | 6                  | 39                  | 2                  | 10                        | BM2             | CT0     | 15 / 0,8                             |
| 10.40.20               | 10 - 1000                           | 36         | 4              | A               | 40                 | 10                 | 44                  | 2                  | 20                        |                 | CT3     | 24 / 2,5                             |
| 10.38.25               | 10 - 1000                           | 38         | 6              | A               | 38                 | 10                 | 46                  | 2                  | 25                        |                 | CLR3U   |                                      |
| 10.46.30               | 10 - 1000                           | 40         | 10             | A               | 46                 | 10                 | 48                  | 2                  | 30                        |                 | CLR4U   |                                      |
| M.10.30.30             | 80 - 1000                           | 40         | 10             | AB              | 30                 | 10                 |                     | 2                  | 30                        |                 | CLR3U   |                                      |
| M.10.42.45             | 80 - 1000                           | 43         | 20             | AB              | 42                 | 10                 |                     | 2                  | 45                        |                 | CLR3U   |                                      |
| 10.46.50               | 200 - 1000                          | 44         | 25             | AB              | 46                 | 10                 |                     | 1,5                | 50                        |                 | CLR4U   |                                      |
| M.10.38.30             | 400 - 1000                          | 40         | 10             | A               | 38                 | 10                 | 48                  | 2                  | 30                        |                 | CLR3U   |                                      |
| M.10.45.45             | 400 - 1000                          | 43         | 20             | A               | 45                 | 10                 | 51                  | 2                  | 45                        |                 | CLR4U   |                                      |
| M.10.45.70A            | 400 - 1000                          | 47         | 50             | A               | 45                 | 10                 | 55                  | 2                  | 70                        |                 | CLR4U   |                                      |
| M.10.40.100            | 400 - 1000                          | 50         | 100            | A               | 40                 | 10                 | 59                  | 2                  | 100                       |                 | CLR6U   |                                      |
| M.10.40.30             | 500 - 1000                          | 40         | 10             | A               | 40                 | 10                 | 48                  | 2                  | 30                        |                 | CLR3U   |                                      |
| M.10.45.50             | 500 - 1000                          | 44         | 25             | AB              | 45                 | 10                 |                     | 2                  | 50                        |                 | CLR4U   |                                      |
| M.10.45.70             | 500 - 1000                          | 47         | 50             | AB              | 45                 | 10                 |                     | 2                  | 70                        |                 | CLR4U   |                                      |
| M.10.45.100            | 500 - 1000                          | 50         | 100            | AB              | 45                 | 10                 |                     | 2                  | 100                       |                 | CL6U    |                                      |
| M.10.50.100            | 800 - 1000                          | 50         | 100            | AB              | 50                 | 10                 |                     | 2                  | 100                       |                 | CLR4U   |                                      |
| <b>1050 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M.10.12.30             | 20 - 1050                           | 40         | 10             | A               | 12                 | 6                  | 48                  | 2                  | 30                        | SP              |         | 24 / 5,5                             |
| <b>1400 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M.14.40.30             | 700 - 1400                          | 40         | 10             | A               | 40                 | 10                 | 48                  | 2                  | 30                        |                 | CLR3U   |                                      |
| M.14.40.50             | 700 - 1400                          | 44         | 25             | A               | 40                 | 10                 | 52                  | 2                  | 50                        |                 | CLR4U   |                                      |
| M.14.45.70             | 700 - 1400                          | 47         | 50             | A               | 45                 | 10                 | 55                  | 2                  | 70                        |                 | CLR4U   |                                      |
| <b>1900 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M.19.33.50             | 1880 - 1900                         | 44         | 25             | A               | 33                 | 9                  | 53                  | 1,5                | 50                        |                 | CLR4U   | 15 / 10,2                            |
| M.19.50.100            | 1800 - 1900                         | 50         | 100            | AB              | 50                 | 10                 |                     | 2                  | 100                       |                 | CLR4U   |                                      |
| <b>1950 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M.19.37.22             | 850 - 1950                          | 37         | 5              | A               | 37                 | 8                  | 45                  | 1,5                | 22                        | BM10            | CLR3U   | 15 / 4                               |
| M.19.40.30             | 850 - 1950                          | 40         | 10             | A               | 40                 | 8                  | 48                  | 1,5                | 30                        | BM10            | CLR3U   | 15 / 5                               |
| M.19.40.50             | 850 - 1950                          | 44         | 25             | A               | 40                 | 8                  | 53                  | 1,5                | 50                        |                 | CLR4U   | 15 / 12,5                            |
| M.19.45.70             | 850 - 1950                          | 47         | 50             | A               | 45                 | 10                 | 55                  | 1,5                | 70                        |                 | CL4U    |                                      |
| M.19.40.100            | 850 - 1950                          | 50         | 100            | A               | 40                 | 10                 | 58                  | 1,5                | 100                       |                 | CL6U    |                                      |

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|------------------------|-------------------------------------|------------|----------------|-----------------|--------------------|--------------------|---------------------|--------------------|---------------------------|-----------------|---------|--------------------------------------|
|                        |                                     | O/P<br>dBm | Power<br>Watts |                 |                    |                    |                     |                    |                           | Module          | Coffret |                                      |
| <b>2000 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M20.12.30              | 950 - 2000                          | 40         | 10             | A               | 12                 | 8                  | 48                  | 2                  | 30                        | SP              |         | 24 / 5,4                             |
| 20.22.12               | 20 - 2000                           | 30         | 1,6            | A               | 23                 | 7                  | 41                  | 2,5                | 12                        | BM9             | CT2     | 15 / 1,3                             |
| 20.34.15A              | 500 - 2000                          | 34         | 2,5            | A               | 34                 | 8                  | 43                  | 2,5                | 15                        | BM9             | CT2     |                                      |
| M.20.37.22             | 1000 - 2000                         | 37         | 5              | A               | 37                 | 8                  | 45                  | 2                  | 22                        | BM10            | CLR3U   | 15 / 4                               |
| M.20.40.30             | 1000 - 2000                         | 40         | 10             | A               | 40                 | 8                  | 48                  | 2                  | 30                        | BM10            | CLR3U   | 15 / 5                               |
| M.20.40.50             | 1000 - 2000                         | 44         | 25             | A               | 40                 | 8                  | 52                  | 2                  | 50                        |                 | CL4U    | 15 / 8,2                             |
| M.20.45.70             | 1000 - 2000                         | 47         | 50             | A               | 45                 | 8                  | 55                  | 2                  | 70                        |                 | CL4U    |                                      |
| M.20.40.100            | 1000 - 2000                         | 50         | 100            | A               | 40                 | 10                 | 59                  | 2                  | 100                       |                 | CL6U    |                                      |
| <b>2300 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M.23.45.70             | 1700 - 2300                         | 47         | 50             | A               | 45                 | 8                  | 54                  | 2                  | 70                        |                 | CL4U    |                                      |
| <b>2500 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M.25.45.65             | 1500 - 2500                         | 46         | 40             | A               | 45                 | 8                  | 54                  | 2                  | 65                        |                 | CL4U    |                                      |
| M.25.50.90             | 1500 - 2500                         | 49         | 80             | A               | 50                 | 8                  | 57                  | 2                  | 90                        |                 | CL6U    |                                      |
| <b>2600 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M.26.34.15             | 1300 - 2600                         | 33         | 2              | A               | 34                 | 7                  | 41                  | 2                  | 15                        | BM10            | CLR3U   | 15 / 1,5                             |
| M.26.37.22             | 1300 - 2600                         | 37         | 5              | A               | 37                 | 10                 | 45                  | 2                  | 22                        | BM10            | CLR3U   | 15 / 4,2                             |
| M.26.40.30             | 1300 - 2600                         | 40         | 10             | A               | 40                 | 7                  | 48                  | 2                  | 30                        | BM10            | CLR3U   | 15 / 5,2                             |
| M.26.40.45             | 1300 - 2600                         | 43         | 20             | A               | 40                 | 7                  | 51                  | 2                  | 50                        |                 | CLR4U   | 15 / 8,5                             |
| <b>2700 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M.27.40.30             | 1350 - 2700                         | 40         | 10             | A               | 40                 | 10                 | 48                  | 2                  | 30                        |                 | CL3U    |                                      |
| M.27.40.45             | 1350 - 2700                         | 43         | 20             | A               | 40                 | 10                 | 51                  | 2                  | 45                        |                 | CL4U    |                                      |
| M.27.45.65             | 1350 - 2700                         | 46         | 40             | A               | 45                 | 10                 | 54                  | 2                  | 70                        |                 |         |                                      |
| <b>3100 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M.31.32.18             | 2700 - 3100                         | 35         | 3              | A               | 32                 | 6                  | 44                  | 1,5                | 18                        | BM8             | CLR3U   | 15 / 3                               |
| <b>3800 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M.38.40.30             | 3400 - 3800                         | 40         | 10             | A               | 40                 | 10                 | 48                  | 2                  | 30                        | SP              | CLR3U   | 15 / 7                               |
| <b>4000 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| 40.28.10               | 1000 - 4000                         | 30         | 1              | A               | 28                 | 6                  | 38                  | 2,5                | 10                        | BM9             | CT2     | 15 / 1,0                             |
| M.40.30.22             | 2000 - 4000                         | 37         | 5              | A               | 30                 | 8                  | 45                  | 1,5                | 22                        | BM8             | CLR3U   | 15 / 3,2                             |
| M.40.40.30             | 2000 - 4000                         | 40         | 10             | A               | 40                 | 8                  | 49                  | 1,5                | 30                        |                 | CL4U    |                                      |
| M.40.40.45             | 2000 - 4000                         | 43         | 20             | A               | 40                 | 8                  | 52                  | 1,5                | 45                        |                 | CL4U    |                                      |
| M.40.40.60             | 2000 - 4000                         | 46         | 40             | A               | 40                 | 8                  | 54                  | 1,5                | 60                        |                 | CL4U    |                                      |
| M.40.43.90             | 2000 - 4000                         | 49         | 80             | A               | 43                 | 8                  | 58                  | 1,5                | 90                        |                 | CLR4U   |                                      |
| <b>5000 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M.50.20.15             | 3000 - 5000                         | 33         | 2              | A               | 20                 | 10                 | 41                  | 2,5                | 15                        | BM9             | CL3U    | 15 / 1,5                             |
| <b>5100 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M.51.38.15             | 4900 - 5100                         | 33         | 2              | A               | 38                 | 8                  | 41                  | 1,5                | 15                        | SP              | CLR3U   | 15 / 2                               |
| M.51.38.20             | 4900 - 5100                         | 36         | 4              | A               | 38                 | 8                  | 44                  | 1,5                | 20                        | SP              | CLR3U   | 15 / 5                               |
| M.51.45.80             | 5000 - 5100                         | 48         | 60             | A               | 45                 | 10                 | 56                  | 2                  | 80                        |                 | CLR4U   |                                      |
| <b>5900 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M.59.33.14             | 5400 - 5900                         | 33         | 2              | A               | 33                 | 8                  | 41                  | 1,5                | 14                        | SP              | CLR3U   | 15 / 1,7                             |
| M.59.40.30             | 5400 - 5900                         | 40         | 10             | A               | 40                 | 8                  | 48                  | 1,5                | 30                        |                 | CLR3U   |                                      |
| <b>6400 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M.64.24.10             | 5900 - 6400                         | 30         | 1              | A               | 24                 | 8                  | 38                  | 1,5                | 10                        | SP              | CLR3U   | 15 / 1                               |
| M.64.30.15             | 5900 - 6400                         | 33         | 2              | A               | 30                 | 8                  | 41                  | 1,5                | 15                        | SP              | CLR3U   | 15 / 2                               |
| M.64.40.30             | 5900 - 6400                         | 40         | 10             | A               | 40                 | 8                  | 48                  | 1,5                | 30                        |                 | CLR4U   |                                      |
| <b>7100 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M.71.40.30             | 6400 - 7100                         | 40         | 10             | A               | 40                 | 8                  | 48                  | 1,5                | 30                        |                 | CLR3U   |                                      |
| <b>8500 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M.85.40.30             | 7700 - 8500                         | 40         | 10             | A               | 40                 | 8                  | 48                  | 1,5                | 30                        |                 | CLR4U   |                                      |
| M.85.24.7              | 8000 - 8500                         | 27         | 0,5            | A               | 24                 | 8                  | 35                  | 1,5                | 7                         | SP              | CLR3U   | 15 / 0,8                             |
| M.85.30.10             | 8000 - 8500                         | 30         | 1              | A               | 30                 | 8                  | 41                  | 1,5                | 10                        | SP              | CLR3U   | 15 / 1                               |
| <b>9600 MHz</b>        |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M.96.33.25             | 8500 - 9600                         | 38         | 6              | A               | 33                 | 8                  | 45                  | 1,8                | 25                        | SP              | CLR3U   | 15 / 4                               |
| <b>10000 MHz</b>       |                                     |            |                |                 |                    |                    |                     |                    |                           |                 |         |                                      |
| M.100.20.10            | 9950 - 10000                        | 30         | 1              | A               | 20                 | 8                  | 38                  | 1,5                | 10                        | SP              | CT3     | 15 / 1                               |
| M.100.35.22            | 9900 - 10000                        | 37         | 5              | A               | 35                 | 8                  | 45                  | 1,8                | 22                        | SP              | CLR3U   | 15 / 5                               |
| M.100.30.30            | 9900 - 10000                        | 40         | 10             | A               | 30                 | 8                  | 48                  | 1,8                | 30                        |                 | CLR3U   |                                      |