

# Telewave Systems Engineering Request

|                    |                     |
|--------------------|---------------------|
| Company Name:      | Request Date:       |
| Company Website:   | Quote Require Date: |
| Contact Name:      | Expect Order Date:  |
| Contact Phone/s:   | Who Referred Us:    |
| Contact Email/s:   |                     |
| User/Project Name: |                     |

Please answer the questions that are relevant to your project, this questionnaire is generic. If there are additional specifics regarding the project, we can discuss with you while we are designing your solution.

Any external descriptions, drawings, schematics, or pictures of the site or existing equipment that are relevant and would help us to understand the requirements for the project are appreciated.

International customers please note that we think in "U.S. Customary Units" of measurement. If your size or length specifications are in Metric terms, please indicate this in your request documents or drawings.

Let us know the frequency and power level of any high power transmitters with antennas that are physically close to your receive antenna/s (TV/FM broadcast, Paging, NOAA weather, etc.)

Let us know the frequency of any receivers with antennas that are physically close to your TX antenna/s.

Details for all of our markets, services and products can be found on our web site at [www.telewave.com](http://www.telewave.com).

## System Specifics

|   |   |
|---|---|
| Primary Use (Pubic Safety, Amateur, etc.)   |   |
| Modulation (Analog, P25-II, NXDN, etc.)   |   |
| Is this a "Trunked" system? If so Type?   |   |
| Planning to expand the system? Details?   |   |
| For Simplex channels, are the radio/s transceivers or separate TX/RX ports?               |   |
| Is TX power monitoring (power sensor & meter panel) needed?                               |   |
| Is an Alarm Panel (pwr sensor, meter, NO/NC dry contacts) needed?                         |   |
| Pre-amp (LNA) needed? Gain desired?<br><i>(Bi-Polar standard or PHEMT optional)</i>       | <i>Included in multi-CH distribution panel</i>      |
| Is Tower Top pre-selector & LNA needed?<br><i>(PHEMT LNA standard) (&gt; 300 MHz sys)</i> | <i>Std TT gain = LNA max gain minus filter loss</i> |
| Site Power Supply Voltage?  | <i>120 VAC or 220 VAC and/or 12/24/48 VDC?</i>      |
| Is the radio site located at a high altitude?   | <i>&gt; 10,000 Feet / 3000 M</i>                    |

## System Antenna/s

Antenna selection and configuration can be very complex, and is specific to each installation location and desired coverage area/s. Telewave Systems Engineers can discuss options & trade-offs for each case.

|   |  |
|---|--|
| Antenna/s requested? (or Cust Supplied?)  |  |
| Antenna/s duplexed? (TX & RX share Ant) or separate TX & RX Ant? (Supplied or Not)    |  |
| For Separate TX & RX antenna, will they be Horizontally or Vertically separated?      |  |
| For Separate TX & RX antenna, what is the max Horiz/Vert separation avail? (ft/meter) |  |
| Describe any specific Antenns requirement, pattern, gain, tilt, or mounting desired.  |  |

# Telewave Systems Engineering Request

## System Component Mounting (Panels/Rails – 19 inch Rack/Cabinet)

Cavities for frequencies below 108 MHz are very long and heavy. They can only be mounted using rails. The rail assemblies can then be mounted vertically inside a rack/cabinet, or attached to a wall/ceiling.

Cavities for frequencies above 108 MHz can be rack mounted vertically on rails or horizontally on panels.

Some VHF/UHF cavities for frequencies between 108 MHz to 512 MHz require 30 inches from the face to the bottom of the cavity and an additional 6 inches from the face to the end of fully extended tuning rods.

Note these max installed dimensions when planning for horizontal or vertical installations in racks/cabs.

The 48 inch tall by 24 inch wide racks for 10 inch cavity combiners are obsolete and no longer available.

|  |  |
|--|--|
| System mounting - Panels or Rails?<br>(See notes above)                                  |  |
| For Panel mounted systems – Panel Color?<br>(Default color Silver – alternate is Black)  |  |
| Is a Rack or Cabinet requested?<br>(Or customer supplied, if so how tall (RU)?)          |  |
| If you need an open Telco rack, how tall?<br>Our standard heights are 72 or 84 inches.   |  |
| If you need an enclosed cabinet, how tall?<br>Standard height is 72 inches – Color Black |  |
| For an enclosed cabinet do you need door locks? If yes, key or combination?              |  |
| For an enclosed cabinet do you need wheel/castors? If Yes, with/without locks?           |  |

## System Frequencies

You can leave the table below blank if you can supply the information in an external list. Indicate the name or use of the frequencies including those that are optional or future expansion. We assume the transmitter duty cycle for Public Safety & any Trunked System to be 100%.

| #  | Use / Name/ Description / Etc. | Duty Cycle % | TX (Watts) | TX Freq.(MHz) | RX Freq.(MHz) |
|----|--------------------------------|--------------|------------|---------------|---------------|
| 1  |                                |              |            |               |               |
| 2  |                                |              |            |               |               |
| 3  |                                |              |            |               |               |
| 4  |                                |              |            |               |               |
| 5  |                                |              |            |               |               |
| 6  |                                |              |            |               |               |
| 7  |                                |              |            |               |               |
| 8  |                                |              |            |               |               |
| 9  |                                |              |            |               |               |
| 10 |                                |              |            |               |               |
| 11 |                                |              |            |               |               |
| 12 |                                |              |            |               |               |

For additional information or to purchase, please reach out to us at:

|                   |                      |                      |
|-------------------|----------------------|----------------------|
| Sales/RMA/Status  | 1-408-929-4400 Opt 1 | sales@telewave.com   |
| Technical Support | 1-408-929-4400 Opt 2 | support@telewave.com |