



FR5000/FR6000

THE REPEATER FOR NOW,
AND THE FUTURE



| FEATURE | FUNCTION | BENEFIT |
|-------------------------------------|--|---|
| GENERAL | | |
| Scaleable-Expandable | Able to add additional iDAS repeater modules to the 2RU chassis. | <ul style="list-style-type: none"> • Reduced rack space – smaller physical footprint |
| Multi-Mode Operation | Can program the repeater for analog 25 and 12.5 Kc operation, or 6.26 Kc NXDN FDMA digital operation. | <ul style="list-style-type: none"> • Allows easy, no cost transition path to 12.5 narrow analog or 6.25 NXDN digital operation • Simple programming can tailor the repeater modules operation mode |
| Mixed Mode Operation | Program the repeater for auto sense capability. The type of input signal received by the repeater is repeated, either digital or analog, on the same channel pair. | <ul style="list-style-type: none"> • Analog users and 6.25 Digital users can share the same frequency pair • The repeater “senses” the incoming mode and repeats in the mode received • Able to introduce 6.25 IDAS NXDN radios onto your repeater pair, and continue to provide analog service for the legacy users |
| Double Your Channel Capacity | Ability to use 6.25 NXDN IDAS operation. | <ul style="list-style-type: none"> • 6.25 Kc Spectrum Occupancy is half that of 12.5 Kc • Double your channel capacity by relicensing current 12.5 kc channel to 6.25 NXDN • Effectively provides two voice or data channels where there was only one |
| Multiple Table | There are 15 unique code tables, each table containing 15 possible CTCSS-DCS and RAN code combinations . Each CH can be assigned one of the 15 tables. | <ul style="list-style-type: none"> • Community code panel built in • Allows for multiple groups of users, to access the repeater channel, with privacy |

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| Programmable D-SUB 25 PIN Connector | Allows for external controllers to be interfaced with the repeater. | <ul style="list-style-type: none"> • Simplifies interfacing with External Controllers • Programmable pins can be software configured • Integrate tone or DC interface panels for console operator |
| AMBE +2 Codec | Digital Vocoder. | <ul style="list-style-type: none"> • Crisp and Clear Audio • Simultaneous data communication |
| 32 Memory Channels | Programmable in software. | <ul style="list-style-type: none"> • Flexibility to access multiple agencies |
| CWID Transmission | Transmits a pre-programmed CWID station identifier with adjustable speed, audio frequency and interval. | <ul style="list-style-type: none"> • Ensure compliance with FCC regulations |
| Channel Modules | Install-Swap-RF repeater modules. | <ul style="list-style-type: none"> • Quick installation • Addition of modules is afforded by the scalable design • Effectively provide two self-contained repeaters in one 2RU chassis (VHF or UHF) |
| Self Check Function | Checks for internal errors. | <ul style="list-style-type: none"> • Provides easy maintenance and service |
| Wide/Narrow Channel Spacing | 12.5 kHz and 25 kHz channel bandwidth. | <ul style="list-style-type: none"> • Compatibility with the older (wide) and newer (narrow) channel assignments • Very flexible to grow with the users changing needs |
| Built In Inversion Scrambling | Voice encryption for communications privacy. | <ul style="list-style-type: none"> • Optional UT-109R provides up to 32 scrambling codes • Optional UT-110R offers up to 1020 code combinations • Analog Mode only- Base Station Operation • Provides for additional communications security |
| High Power (50W) | Frequent checking of an assigned channel. | <ul style="list-style-type: none"> • Important frequencies can be continually checked for activity. • Users can assign one channel as priority channel |
| Frequency Error | +/- .5 ppm. | <ul style="list-style-type: none"> • Extremely stable transmitter |
| Time Out Timer | Disables transmitter after extended use. | <ul style="list-style-type: none"> • Helpful if the radio is accidentally keyed, or if a user gets too "long-winded", tying up the frequency beyond normal use • Transmitter can also be locked out for a programmable period of time following time out |

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