

REPEATERS / BDAs

Configuration Guide



- VHF & UHF
- TETRA & TETRAPOL
- iDEN & TETRA 800
- Cellular 800
- GSM 800, 900 & 1900
- DCS 1800
- PCS 1900
- UMTS

Repeater

FIPLEX family of RF Repeaters (BDAs) is an optimal technical and economical solution to improve and extend the coverage of trunking and cellular systems. Robust design, high linearity and sharp filtering, along with the local and/or remote capability, are main features that define this family of Repeaters as a perfect trade off between cost and benefit.

This family of Repeaters is available for:

- VHF and UHF
- TETRA400MHz and TETRAPOL
- SMR and TETRA 800
- Cellular 800 (AMPS, CDMA & TDMA)
- GSM 800, 900 & 1900
- DCS 1800
- PCS 1900 (CDMA & TDMA)
- UMTS

Compatibility:

FIPLEX family of Repeaters (BDAs) is compatible with all analog and digital communications formats, modulations and systems, such as:

- NBFM
- AMPS
- iDEN
- GSM/EDGE/GPRS
- CDMA (IS-95 & 1X)
- WCDMA
- PCS
- TDMA

Products Line:

FIPLEX family of Repeaters is divided in four groups:

- Ultra Compact Repeaters
- Compact Repeaters
- Band Selective Repeaters
- Channel Selective Repeaters

Ultra Compact Repeaters:

Ultra Compact Repeaters line is designed for Full Band Applications in SMR, AMPS, GSM900, DCS, PCS and UMTS systems. This line is not available for VHF, UHF, TETRA 400MHz and TETRAPOL

The application of this line of Repeaters is intended to increase the coverage of all operators in places like offices, parkings, shopping centers, supermarkets, jails, and many others.

This line of repeaters is composed by two versions:

- 35 dB gain and +10 dBm composite output power
- 60 dB gain and +20 dBm composite output power

The compact design of FIPLEX Ultra Compact Repeaters allows easy installation and esthetic termination.

Compact Repeaters (Band Selective, fixed):

FIPLEX line of Compact Repeaters are designed for Full band on Narrow band operation in VHF, UHF, TETRA, SMR, AMPS, GSM, DCS, PCS and UMTS systems.

The application of this line of Repeaters is intended to increase the coverage of one or many operators in open or close areas (indoor or outdoor repeating)

Main features of this line of Repeaters are:

- Gain regulation in 1 dB steps
- Antennas isolation control
- Intermediate filter capability for narrow or special BW operation.
- Alarms panel
- Remote control capability via wireless modem as optional
- FCC and ETSI compliance

Gain and composite output power levels are:

- Gain: 60 & 80 dB
- Composite output power: +20, +27 & +35 dBm

The compact design of FIPLEX Compact Repeaters allows easy installation and esthetic termination.

Band Selective Repeaters, BW adjustable:

FIPLEX line of Band Selective Repeaters is intended to be used when specific carriers or selected spectrum BW need to be amplified. The frequency response of the Repeater (center frequency and bandwidth) can be software modified to respond to network planification.

Typical applications of this line of Repeaters include close and open area repeating (indoor and outdoor)

Main features of Band Selective Repeaters are:

- Gain regulation in 1dB steps
- Antenna isolation control
- BW selective from 0.2 to 15MHz and from 0.2 to 25MHz, adjustable
- Up to 4 BW selective filters
- Alarms panel
- Local operation and monitoring, via RS232
- Remote operation and monitoring, via wireless modem
- Proprietary operation and maintenance software (OMS)
- Battery backup input
- FCC and ETSI compliance

Gain and composite output power levels are:

- Gain: 80 dB
- Composite output power: +20, +27, +35.

The compact design of FIPLEX Repeaters allows easy installation and esthetic termination.

Channel Selective Repeaters:

FIPLEX Channel Selective Repeaters line is intended to be used in applications when single or multiple carrier repeating is required, increasing the Repeater output power efficiency and minimizing interference from unwanted signals or carriers, especially in urban scenarios, where the RF congestion levels are high. Typical applications of this line of Repeaters include close and open area repeating (indoor and outdoor)

Main features of Channel Selective Repeaters are::

- Manual gain regulation in 1dB steps.
- Antenna isolation control.
- Channel selective filters available for: iDEN, GSM, TDMA, CDMA, WCDMA
- Up to 8 channel selective filters
- Alarms panel
- Local operation and monitoring, vía RS232
- Remote operation and monitoring, via wireless modem
- Proprietary operation and maintenance software (OMS)
- Battery backup input
- FCC and ETSI compliance

Gain and composite output power levels are:

- Gain: 80dB
- Composite output power: +20, +27, +35.

The compact design of FIPLEX Repeaters allows easy installation and esthetic termination.