

## DUAL BAND TETRA/iDEN CELL ENHANCER



### Applications:

- TETRA Digital Trunked Radio
- iDEN Digital Radio
- Tunnel and In-building Coverage
- Automation & Industrial Control
- In-plant SCADA Network

The Dual Band TETRA-iDEN Cell Enhancer is an outdoor rated (IP66) and natural air cooled bi-directional Radio Frequency (RF) signal booster operating in 400~430 Mhz Tetra band and 806~869Mhz iDEN band. This product is customisable to accommodate other frequency ranges.

Typical application of the Dual Band TETRA-iDEN Cell Enhancer is off-air repeater, to improve RF coverage areas such as underground tunnels, in-building car parks, offices, and shopping malls for TETRA digital trunk radio system and iDEN digital radio system.

Dual Band TETRA-iDEN Cell Enhancer provides 60dB min. Gain to both downlink and uplink RF signal from the Base Stations, amplifying the signal in the blind spot areas to sufficient level for communication.

The Dual Band TETRA & iDEN Cell Enhancer offers the following advantage:

- Support Dual TETRA & iDEN Band
- Compact and Light-weight
- IP66 rated for harsh outdoor environment
- Fan Free, Maintenance Free
- Simultaneous Transmission & Reception
- High Output Power



# DUAL BAND TETRA/IDEN CELL ENHANCER

## Specifications:

### Electrical Specifications:

Models	DCE-380/410-806/869
Frequency Ranges	410~430Mhz & 806~869Mhz
Type	Band Selective
Bandwidth	5Mhz (410~430Mhz)/18Mhz (806~824Mhz)
Maximum Composite Power	
Up Link	+18 dBm @1 carrier, +12dBm @ 4 carriers
Down Link	+36 dBm @ 1 carrier, +30 dBm @ 4 carries
Maximum Input Power	
Up Link	-20 dBm
Down Link	-14dBm
OIP3	
Up Link	> +41 dBm
Down Link	> +54 dBm
Spurious Emissions	< -36 dBm, according to EN301489-1; EN301489-18
Gain Uplink & Down link	60 dB
Gain Adjustment Range.	30dB in 1dB steps
Nominal Impedance	50 ohm
Minimum Return Loss	-18 dB min
Noise Figure	<6 dB
Connector Type	N Female
Power	230 VAC / 50-60Hz @ 5A

### Management:

Local Alarms	LCD Indicators/Dry Contacts
Local Connectivity	Local Management Software
Remote Connectivity	Serial Communication to Management Software

### Mechanical Specifications:

Cabinet type	IP66
Weight	< 80 kg
Dimension (LxBxH)	700x400x700mm

### Environment Specifications:

Operating Temperature	0 to +55 °C
Humidity	95% non-condensing