

CSR-DMT

UHF/PMR/DMR/TETRA Channel Selective Digital Repeater

- Full band bi-directional digitally controlled amplifier with
- Built-in DSP filtering that is highly flexible and configurable on site.
- Two version available cover UL/DL of 380 - 395 and 410 - 425 MHz.
- [Download the user manual.](#)
- [Download the software.](#)



DESCRIPTION

- The CSR-DMT is a UHF full band bi-directional digitally controlled amplifier with built-in DSP-filtering that offers communication improvement in Public Safety, DMR, LMR, PMR systems.
- Full band repeater.
- Digital processing based filtering.
- Fully reconfigurable through software.
- Four band-segments in UL/DL directions.
- Bi-directional.
- UL & DL gain is separately adjustable.
- Automatic gain control.
- Compact design for easy installation.
- Small dimensions and light weight.
- Status indicating LEDs.
- Local control.

ORDERING DESIGNATIONS

TYPE	UPLINK MHz	DOWNLINK MHz	PRODUCT NO.
CSR-DMT-380	380 - 385	390 - 395	127000001
CSR-DMT-410	410 - 415	420 - 425	127000002

[Other frequencies available, contact for availability.](#)

SPECIFICATIONS

ELECTRICAL	
MODEL	CSR-DMT
FREQUENCY RANGE	See ordering designations
NUMBER OF INDEPENDENT BAND-SEGMENTS	Uplink: 1 up to 4 Downlink: 1 up to 4
BAND-SEGMENT CENTER FREQUENCIES	Adjustable through software within specified above frequency range with step 12.5 kHz
BANDWIDTH	Full band mode: 5 MHz Selectivity mode 1: 25 kHz - 1 MHz with step 25 kHz (adjustable through software) Selectivity mode 2: 1.1 - 5 MHz with step 100 kHz (adjustable through software)
MAX. GAIN	>70 dB typ. 75 dB
FULL-BAND FLATNESS	±3 dB typ. ±2 dB
MANUAL GAIN ADJUST RANGE	50 dB totally: hardware input attenuator 30 dB (step 1 dB) DSP interstage attenuator for each band-segment 20 dB (step 1 dB)
AUTOMATIC GAIN CONTROL	>60 dB
DOWNLINK OUTPUT POWER*	+19 dBm @ one carrier +16 dBm @ two carriers +13 dBm @ four carriers
UPLINK OUTPUT POWER*	+19 dBm @ one carrier +16 dBm @ two carriers +13 dBm @ four carriers
NOISE FIGURE	4.0 dB
INPUT RF-RANGE	-110...-15 dBm
SPURIOUS EMISSION	According to ETSI standards TS 101 789-1
SUPPLY VOLTAGE	AC: 230 V, 50 Hz
RF INPUTS	N-female, 50 Ω
LOCAL CONTROL INTERFACE	USB
POWER CONSUMPTION	27 W (full activity) ABSOLUTE MAXIMUM
MECHANICAL	
COLOUR	Black (RAL 9005)
CONNECTORS	N-female
DIMENSIONS (L x W x H)	300 x 291 x 103 mm / 11.85 x 11.46 x 4.06 in.
WEIGHT	Approx. 6200 g / 13.67 lb.
MOUNTING	ø8.5 mm / 0.33 in. (4 holes) (mounting on wall)
ENVIRONMENTAL	
OPERATING TEMPERATURE RANGE	0° C → +40° C
IP RATING	IP 55

BLOCK DIAGRAM

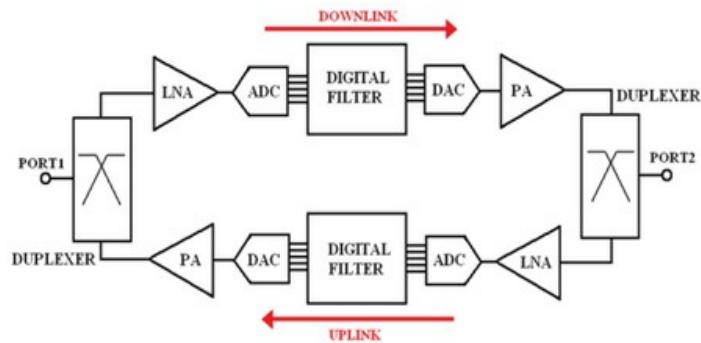
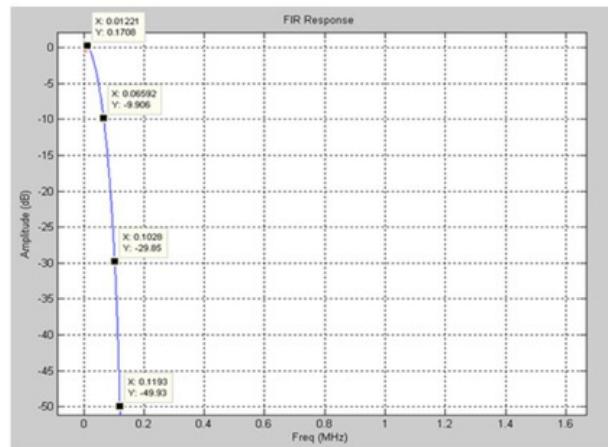


Figure 2: Selectivity mode – 25kHz (half BW).



MOUNTING DETAILS

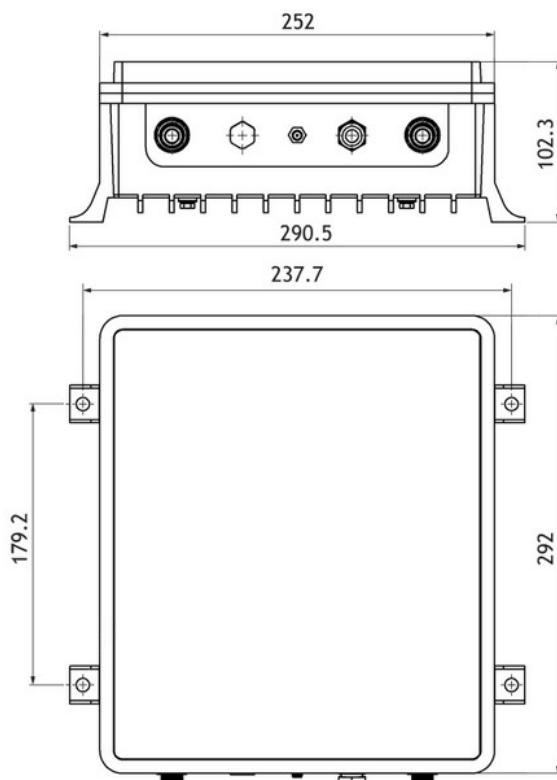


Figure 3: Selectivity mode – 100kHz (half BW).

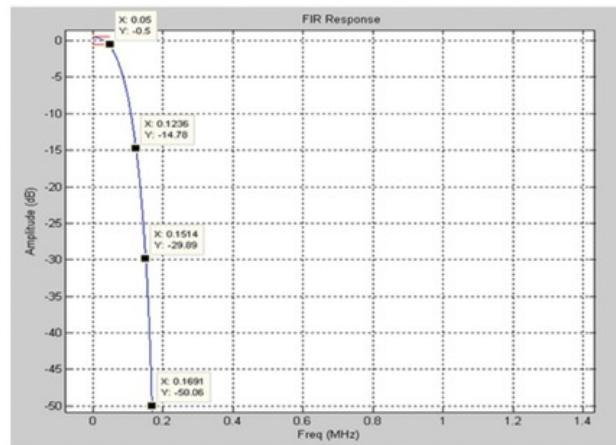


Figure 4: Full band mode – 5 kHz (half BW).

