

UHF/PMR/DMR/TETRA Channel Selective Digital Repeater

DESCRIPTION

- > 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.
- > 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.



SPECIFICATIONS

Electrical	
Model	CSR-DMT
Number Of Independent Band-Segments	Uplink : 1 up to 4 Downlink : 1 up to 4
Frequency	See ordering designations
Band Segments	Adjustable through software within specified above frequency range with step 12.5 kHz
Amp. Gain	> 70 dB typ. 75 dB
Noise Figure	4.0 dB
Full-Band Flatness	±3 dB typ. ±2 dB
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
Power Supply	AC : 100 - 240 VAC, 50 Hz 27 W (full activity) ABSOLUTE MAXIMUM
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)
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
Input Power	-110...-15 dBm

Mechanical	
Emi	According to ETSI standards TS 101 789-1
Connection(s)	N(f)
Colour	Black (RAL 9005)
Dimensions	300 x 291 x 103 mm / 11.85 x 11.46 x 4.06 in.
Weight	Approx. 6.2 kg / 13.67 lb.
Local Control Interface	USB
Mounting	8.5 mm dia. (4 holes)

Environmental	
Operating Temperature Range	0 °C to +40 °C
Ingress Protection	IP55

ORDERING

Model	Product No.	Frequency
CSR-DMT-380	127000001	380 - 385 MHz / 390 - 395 MHz
CSR-DMT-410	127000002	410 - 415 MHz / 420 - 425 MHz

TYPICAL CURVES

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

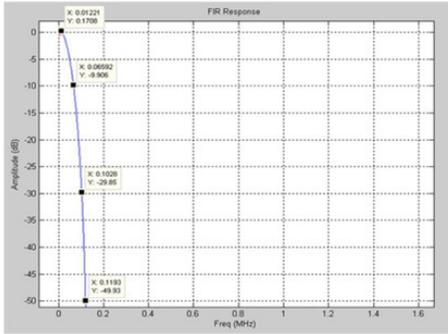


Figure 3: Selectivity mode – 100 kHz (half BW).

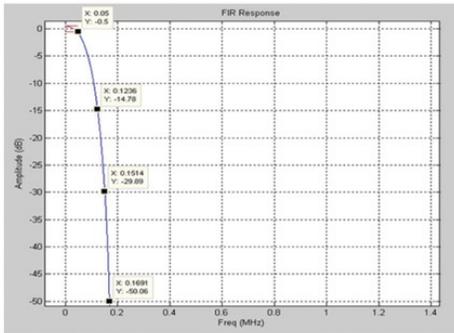
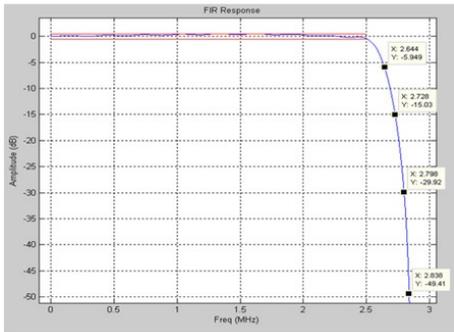
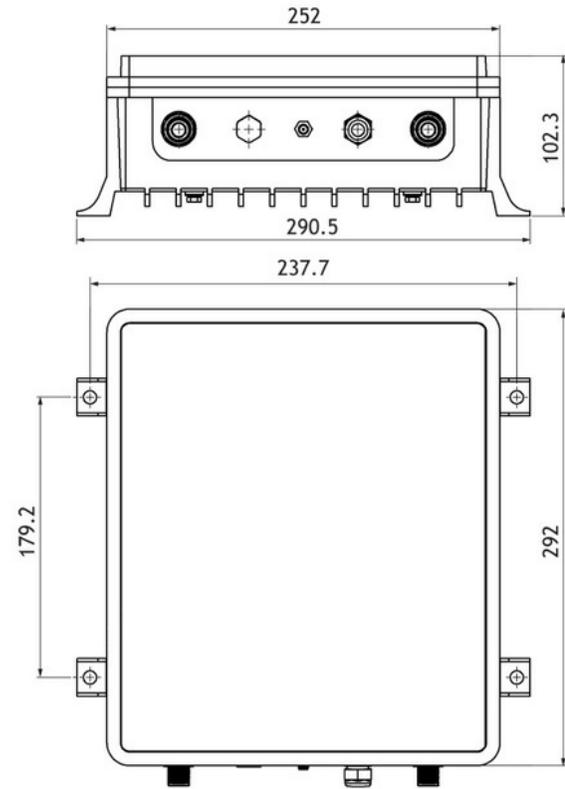


Figure 4: Full band mode – 5 MHz (half BW).

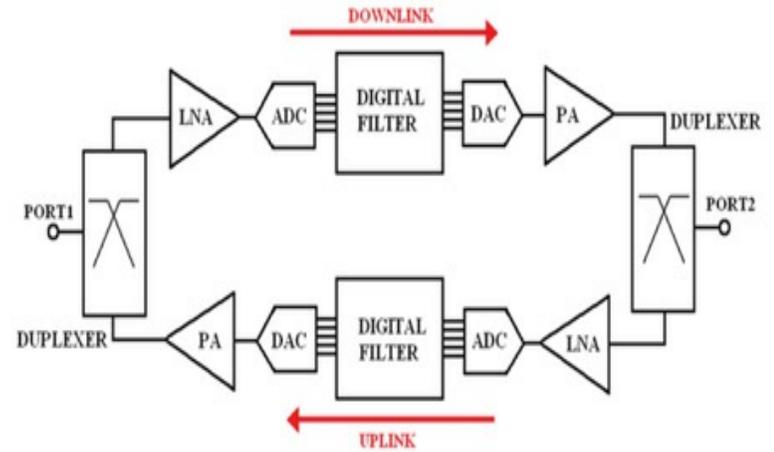


MOUNTING DETAILS



All dimensions are given in mm.

BLOCK DIAGRAM



EU AND UK DECLARATION OF CONFORMITY

Hereby Amphenol Procom declare that the product type CSR-DMT is in compliance with EU Directive 2014/53/EU and the UK Radio Equipment Regulations 2017 (S.I. 2017 No. 1206). The full text of the Declaration of Conformity is available at:

<https://amphenolprocom.com/images/shop/catalog/pdf-for-catalogues/Declaration-of-Conformity-CSR-DMT 380-410.pdf>