

**PHASE | Anywave:
Gap Filler – Repetidor UHF**



Digital Gap Filler

Outdoor Air Cooled Low Power TV Gap Fillers
For Digital TV



Supports all current international digital and mobile TV standards including DTMB, CMMB, DVB-T/H, DVB-T2, ISDB-T, ATSC, and ATSC-MH.

Latest LDMOS Technology for Power Amplification

Fully broadband covering entire UHF Band IV-V

Innovative Echo-Cancellation Technology

Compact weather-proof enclosure designed for outdoor operation (IEC IP55 compliant)



Internal View



Bottom View

Key Features

- Supports current digital and mobile TV standards including DTMB, CMMB, DVB-T/H, DVB-T2, ISDB-T, ATSC, and ATSC-MH
- Various signal processing options support on channel repeater function, RF delay function or translator function
- Various output power levels: 50W/100W/200W
- Compact weather-proof enclosure designed for outdoor operation (IEC IP55 compliant)
- Supports on site channel frequency change: easy operation and straightforward BPF replacement, no need for return-to-factory upgrade
- Patented AECT™ (Adaptive Echo Cancellation) technology continuously, automatically, and adaptively eliminates dynamically varying echoes from the received signal, providing easy installation, reducing engineering cost, and producing stable operation as well as excellent performance
- Patented adaptive power adjustment function continuously and automatically adjusts individual power level to achieve equalized and optimized coverage when multiple units in use
- Auto Mute Function: automatically mutes RF output when the main tower signal is detected OFF and resumes RF output when the main tower signal returns
- Powerful ADPC™ (Adaptive Digital Pre-Correction) provides superior digital correction of all linear and non-linear distortions
- Accurate ESSI (Echo Signal Strength Indicator), RSSI (Received Signal Strength Indicator) and RSNR (Received Signal-to-Noise Ratio) functions provide direct field signal condition assessment and easy installation
- Continuous, automatic and real time measurement and display of shoulder level and SNR of the transmitted signal

Specifications

RF Input

Frequency: UHF
Level: -70 dBm ~ -10 dBm
Connector: 1/2" N-type, female, 50 Ω
RF Bandwidth: 6 or 8 MHz

RF Output

Frequency: UHF
Rated Maximum Output Power: 50 W / 100 W / 200 W

Adjustable Gain Range: ≥ 20 dB, in steps of 0.1 dB
Connector: 1/2" N-type, female, 50 Ω
ALC Range: ≥ 50 dB
Direct Signal Pass Through MER: > 35 dB
Level Stability: $< \pm 0.5$ dB
Frequency Stability: Same as the input frequency, 0ppm
Shoulder Level: < -55 dB
In-band Flatness: $< \pm 0.5$ dB
VSWR: ≤ 1.5 dB
Output Load Return Loss: ≥ 9.5 dB (under normal conditions)

Echo Cancellation Mode

Echo Cancellation: 30 dB (typical value)
Echo Time Range: ≤ 4 μ s
MER Loss
 0 dB Echo: MER Loss ≤ 3 dB or MER ≥ 26 dB
 (depends on main signal SNR)
 10 dB Echo: MER Loss ≤ 5 dB or MER ≥ 26 dB
 (depends on main signal SNR)
Echo Time Range: ≤ 4 μ s
Processing Delay: ≤ 10 μ s (including ICS and DPD)

RF Delay Mode

Adjustable Delay Range: 500000 μ s

Translator Mode

MER Loss: MER Loss ≤ 3 dB or MER ≥ 26 dB (depends on main signal SNR)

Measurement Accuracy

RSSI: < 2 dB
ESSI (ECHO): < 2 dB
RSNR: < 2 dB
TSNR: < 2 dB

Control Interfaces

Front Panel: 6 keys, 4 LED lights / 20 x 2 Backlit LCD screen
RS232 Interface: Connector: DB-9 male
Remote Interface (optional): RJ-45 or Wi-Fi or GPRS

Others

Power Supply: 90~260 VAC, 47Hz ~ 63 Hz
Operating Temperature: -15 $^{\circ}$ C ~ 55 $^{\circ}$ C
Operating Humidity: $\leq 95\%$
Operating Altitude: ≤ 2440 meters (8000 feet)
Size (W x H x D):
 40.5 cm x 56.5 cm x 35.0 cm (without BPF)
 40.5 cm x 76.5 cm x 35.0 cm (with BPF)



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