

DVB-T/H GAP FILLER AG85-1C3 • 470 - 870MHz



FIPLEX Gap Filler for DVB-T/H model **AG85-1C3** is a cost effective and reliable solution designed to extend and improve the coverage area of UHF digital broadcast systems.

AG85-1C3 is a channel selective (agile) device that received signal and retransmits it over the same frequency channel. Channel selection and other parameters are software adjustable, both local and remote controlled.

Typical applications of this Gap Filler are indoor situations such as tunnels, buildings, subways, and outdoor shadowed scenarios such as stadiums, rural and dense urban areas.

Its rugged construction and easy field maintenance reduces operational costs and ensures a high MTBF.



Features & Benefits

Auto diagnostics: Gap Fillers are equipped with a microprocessor module that controls the unit operational parameters. This self check capability provides an instantaneous alarm output under failure situation. Microprocessor module verifies main board status, PA status, power supply status, intermediate filters status, battery backup status, open door and temperature levels.

Antenna isolation control: Gap Fillers are provided with a built in, microprocessor controlled, antenna isolation control. This feature verifies the real antenna to antenna isolation (donor antenna to service antenna), and adjust the maximum available Gap Filler gain to avoid antenna feedback and oscillation, increasing system reliability.

Control: Gap Fillers can be controlled locally via USB, and can be remote controlled using FIPLEX FOMS (FIPLEX Operation and Maintenance Software) via wireless connection. In both situations, local and remote, Gap Fillers parameters can be adjusted (UL gain, DL gain, ON/OFF, etc) and alarms can be supervised (amplifiers status, PA status, power supply status, battery backup status, door open and temperature)

Manual gain control: Gap Fillers gain level can be adjusted to meet system planning requirements. Gain level can be adjusted digitally in 1dB steps. This gain control can be done locally via USB or can be done remote via wireless connection (FOMS).

Automatic Gain Control (AGC): Gap Fillers are equipped with Automatic Gain Control (AGC). The presence of an AGC allows a maximum power operation with maximum dynamic range, and provides a lineal operation that ensures a high quality signals amplification.

Battery backup: Gap Fillers can be powered with AC or DC. Battery backup mode is available for continuous operation in case of AC or Power Supply failure, or when no AC is available.

Weatherproof enclosure: Gap Fillers are equipped with an IP65 enclosure, to allow a simple and easy installation procedure since no special weather protection are required. Standard fixing method is wall mounting. Pole mounting brackets are available as optional.

RF Specifications	
Model number	AG85-1C3-1-8
Frequency range	470 – 870 MHz in sub-ranges
Type	Channel Selective Gap Filler
Number of channel filters.	One (1)
Channel filter BW.	8 MHz
Gain, maximum	90 dB
Passband ripple	+/- 0.3 dB
Gain, manual control	30dB range, digitally controlled in 1dB steps
Antenna isolation control, gain adjustment	0 to 30 dB
AGC range	0 to 45 dB
Output power	+37dBm (5W)
Shoulder	> 38dB @ +/- 4.25MHz
IM generation	- 60 dBc
Noise figure, in dB	5.0 max at maximum output power
Impedance	50Ω
Group delay	5uS max
Connectors	N(f) as standard
VSWR at operating frequencies	1.5:1 max
ETSI	EN 300 744
Supervising Specifications	
Self diagnostic platform	Microprocessor based
Alarms	Yes, amplifiers status, power amplifiers status, power supply failure, battery backup failure, temperature, AGC, RF overload, poor antenna isolation, door open.
Local management and supervising	Local access via USB
Remote management and supervising	Remote access via wireless modem, option RC-G (FIPLEX FOMS)
RoHS compliance	Yes
Electrical & Mechanical Specifications	
AC Supply	110/220 VAC
DC Supply	12 VDC
Housing	IP65
Temp range	-30 to +60 °C
Size, WxDxH, in mm	390 x 390 x 100
Weight	18 Kgs
Mounting	Wall mounting as standard. Option PK for pole mounting.
Fiber optic links	Available as option FO, intended for fiber optic feed configuration and/or long distance runs.