

UHF ECHO CANCELLATION DIGITAL SIGNAL BOOSTERS

450 - 512 MHz • Class A

DH437F

Product Features

- Channel selective, software programmable
- Fully digital signal boosters, FPGA based
- Auto diagnostic
- Uplink squelch, per channel and per time slot
- Antenna feedback cancellation
- User adjustable gain control, UL and DL independent, per channel
- Automatic Gain Control, per channel and per time slot
- Weatherproof enclosure, IP67/NEMA4X
- NFPA compliant
- Built in spectrum analyzer



Digital Signal Boosters

Applications

- For P25, TETRA, DMR, NXDN and Conventional systems
- Mobile fast-deploy communication units
- Outdoor coverage: oil rigs, stadiums, dense urban areas, rural areas, cliffs



Specification

Value

Type	Echo Cancellation Signal Boosters
Frequency range	450 - 512 MHz
Passband BW. min	Channel Selective (90KHz, 45KHz, 30KHz, 20 KHz, and 15KHz BW)
Number of Passband	Channel Selective (90KHz, 45KHz, 30KHz, 20KHz, and 15KHz BW), 1 to 8.
Gain, maximum	80dB
Passband ripple	+/- 2.0 dB
Gain, manual control	28dB range, digitally controlled in 1dB steps
Antenna isolation	Max Gain - 20dB
Composite output power, DL	+37dBm
Composite output power, UL	+24dBm composite
IMD	< -13dBm
Noise figure	7.0dB max at maximum gain
Impedance	50 Ω
Group delay	Channel Selective 90KHz, 14μS Channel Selective 45KHz, 23μS Channel Selective 30KHz, 32μS Channel Selective 20KHz, 45μS Channel Selective 15KHz, 55μS
Maximum input power, no damage	0dBm (UL) -20dBm (DL)
Connectors	N(f) as standard
VSWR at operating frequencies	1.5:1 max
Uplink squelch function	Yes, user selectable, to avoid UL noise when no carriers present, by time slot and by channel

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Specifications	Value
Self diagnostic platform	Microprocessor based
Alarms	Yes, amplifiers status, power amplifiers status, power supply failure, temperature, AGC, RF overload.
Local management and supervising	Local access via USB and Ethernet (Web browser)
Remote management and supervising	Remote access via Ethernet. Wireless MODEM (SNMP) as optional (RC-G)
RoHS compliance	Yes
AC Supply	110/220 VAC, 50/60 Hz.
Power Consumption	120W
DC Supply	Optional, see table
Housing	IP67 / NEMA4X
Temperature range	-13° to 131° F • -25° to +55° C
Cooling	Natural convection
Dimension	20.2 x 18.2 x 9 inches • 514 x 462 x 230 mm
Weight	55 lbs • 25 kg
Mounting	Wall mounting
MTBF	250.000 hours

MODEL	NFPA	RC-G	110-220VAC	+24VDC	-48VDC	4 PORTS	INTERNAL DPX 0.7/3	INTERNAL DPX 2/5	INTERNAL DPX 5/10	[CLK 160] 405-430 450-475 485-512	[CLK 150] 380-410 470-485
DH437F-205	X			X					X	X	
DH437F-206	X				X				X	X	
DH437F-210	X	X	X						X	X	
DH437F-211	X	X		X					X	X	
DH437F-212	X	X			X				X	X	
DH437F-216	X		X					X		X	
DH437F-217	X			X				X		X	
DH437F-218	X				X			X		X	
DH437F-222	X	X	X					X		X	
DH437F-223	X	X		X				X		X	
DH437F-224	X	X			X			X		X	
DH437F-228	X		X				X			X	
DH437F-229	X			X			X			X	
DH437F-230	X				X		X			X	
DH437F-234	X	X	X				X			X	
DH437F-235	X	X		X			X			X	
DH437F-236	X	X			X		X			X	
DH437F-240	X		X						X		X
DH437F-241	X			X					X		X
DH437F-242	X				X				X		X

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DH437F-246	X	X	X						X		X
DH437F-247	X	X		X					X		X
DH437F-248	X	X			X				X		X
DH437F-252	X		X					X			X
DH437F-253	X			X				X			X
DH437F-254	X				X			X			X
DH437F-258	X	X	X					X			X
DH437F-259	X	X		X				X			X
DH437F-260	X	X			X			X			X
DH437F-264	X		X				X				X
DH437F-265	X			X			X				X
DH437F-266	X				X		X				X
DH437F-270	X	X	X				X				X
DH437F-271	X	X		X			X				X
DH437F-272	X	X			X		X				X
DH437F-276	X		X			X				X	
DH437F-277	X			X		X				X	
DH437F-278	X				X	X				X	
DH437F-282	X	X	X			X				X	
DH437F-283	X	X		X		X				X	
DH437F-284	X	X			X	X				X	
DH437F-288	X		X			X					X
DH437F-289	X			X		X					X
DH437F-290	X				X	X					X
DH437F-294	X	X	X			X					X
DH437F-295	X	X		X		X					X
DH437F-296	X	X			X	X					X

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