

# PUBLIC SAFETY 800 MHz DIGITAL SIGNAL BOOSTERS

## PS800 MHz • Class A

DHS37

### Product Features

- Channel Selective, software programmable
- Fully digital signal boosters, FPGA based
- 32 channel independent UL and DL
- Auto diagnostic
- Uplink and downlink squelch, per channel and per time slot
- 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 input and output spectrum analyzer



DHS30 Digital Signal Boosters

### Applications

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



### Specification

### Value

| Specification                  | Value   |
|--------------------------------|---|
| Type                           | Digital Signal Boosters   |
| Frequency range                | 806-824 / 851-869 MHz   |
| Passband BW. min               | Channel Selective (90KHz, 45KHz, 30KHz, 20KHz, and 15KHz BW)  |
| Number of Passband             | Channel Selective (90KHz, 45KHz, 30KHz, 20KHz, and 15KHz BW), 1 to 32   |
| Gain, maximum                  | 80dB  |
| Passband ripple                | +/- 2.0 dB  |
| Gain, manual control           | 28dB range, digitally controlled in 1dB steps   |
| Antenna isolation              | Max Gain + 15dB   |
| Composite output power, DL     | +37dBm  |
| Composite output power, UL     | +24dBm  |
| IMD                            | < -13dBm  |
| Noise figure                   | 9.0dB max at maximum gain   |
| Group delay                    | Channel Selective 90KHz, 14µS<br>Channel Selective 45KHz, 23µS<br>Channel Selective 30KHz, 32µS<br>Channel Selective 20KHz, 45µS<br>Channel Selective 15KHz, 55µS |
| Maximum input power, no damage | 0dBm (UL)<br>-35dBm (DL)  |
| Connectors                     | N(f) as standard  |
| RF Input/Output impedance      | 50Ω   |
| Uplink squelch function        | Yes, user selectable, to avoid UL noise when no carriers present, by time slot and by channel (Channel Selective model only)                                      |
| Self diagnostic platform       | Microprocessor based  |

DOC BD321.01 - 09082018 - FS  
 Fiplex is a registered trademark of Fiplex Communications, Inc.  
 Fiplex Communications, Inc. reserves the right to change specifications without prior notice.

# PUBLIC SAFETY 800 MHz DIGITAL SIGNAL BOOSTERS

## PS800 MHz • Class A

DHS37

| Specifications                    | Value   |
|-----------------------------------|---|
| 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                         | 110VAC, 50/60 Hz.   |
| Power Consumption                 | 220W  |
| DC Supply                         | +24VDC & -48VDC   |
| Housing                           | IP67 / NEMA4X   |
| Temperature range                 | -13° to 131° F • -25° to +55° C   |
| Cooling                           | Natural convection  |
| Dimensions                        | 20.2 x 18.2 x 9 inches • 514 x 462 x 230 mm   |
| Weight                            | 55 lbs • 25 Kg  |
| Mounting                          | Wall mounting   |
| MTBF                              | >50.000 hours   |