

# FLEX All-in-One Solution

## Integrated BDA + Battery Backup + Annunciator

# HONBDA-7S

### Product Features

- Supports Public Safety 700 & 800MHz dual band version
- 24hr Battery backup and Annunciator included in the same cabinet
- Band 14 available
- Upgradeable options: Class B to Class A & 0.5W/27dBm to 2W/33dBm
- Fully digital, FPGA based
- Auto Diagnostic
- Automatic gain control per band; Per channel and per time slot on channel selective mode
- Oscillation detection with alarm and auto-shutdown
- Antenna Isolation measurement feature
- Innovative donor antenna disconnect and malfunction alarms
- EPO switch support
- Weatherproof enclosure, NEMA 4
- NFPA compliant with dry contact alarms
- Uplink and downlink squelch, per channel and per time slot on channel selective mode
- Assisted GUI wizard with Automatic Calibration features (Patent Pending) to reduce the uplink noise
- User adjustable gain control, UL and DL independent, per band and per channel on channel selective mode
- UL2524 2nd Edition Listing with SGS, Nationally Recognized Testing Laboratory (NRTL) approved by OSHA for UL2524
- IFC 2015, 2018, 2021 Edition
- NFPA 72 2013 Edition, NFPA 1221 2016 2019 Edition, NFPA 1225 2022 Edition
- Buy American Compliant: Meets the definition of Domestic Construction Material under the Buy American Act
- 3 years Warranty



### Applications

- Provides simultaneous support of Analog and Digital communications for P25 Phase I & Phase II, DMR, NXDN and Conventional systems
- Indoor coverage: buildings, schools, hospitals, casinos, tunnels, metro stations
- Outdoor coverage: oil rigs, stadiums, dense urban areas, rural areas

### Specifications

### Value

| Specifications             | Value                                                                                                                                                                                                                         |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type                       | Dual Band Digital Signal Booster                                                                                                                                                                                              |
| Frequency Range            | HONBDA-7S27B-IB-10: DL: 758-775 & 851-861MHz   UL: 788-805 & 806-816MHz<br>HONBDA-7S27B-IB-06: DL: 769-775 & 851-861MHz   UL: 799-805 & 806-816MHz<br>HONBDA-7S27B-IB-18: DL: 758-776 & 851-869MHz   UL: 788-806 & 806-824MHz |
| Passband BW. min           | 100kHz to full band or Channel Selective (After Upgrade to Class A)                                                                                                                                                           |
| Number of Passband         | 2 BWA per band or 32 channel filters + 2 BWA per band (After Upgrade to Class A)                                                                                                                                              |
| Channel Filter Options     | 150kHz, 100kHz, 75kHz, 62.5kHz, 50kHz, 37.5kHz, 25kHz and 12.5kHz (After Upgrade to Class A)                                                                                                                                  |
| BWA Filters                | Adjustable from 100kHz to full band in step in steps of 50kHz                                                                                                                                                                 |
| Gain, Maximum              | 85 dB                                                                                                                                                                                                                         |
| Passband Ripple            | +/- 2.0 dB                                                                                                                                                                                                                    |
| Gain, Manual Control       | 30dB range, digitally controlled in 1dB steps, per link, per band                                                                                                                                                             |
| Antenna Isolation          | Max Gain + 20dB                                                                                                                                                                                                               |
| Composite Output Power, DL | +27dBm or +33dBm (After Upgrade to 2W) per band                                                                                                                                                                               |
| Composite Output Power, UL | +24dBm per band                                                                                                                                                                                                               |
| IMD                        | < -13dBm                                                                                                                                                                                                                      |
| Noise Figure               | 9.0dB max                                                                                                                                                                                                                     |

## Specifications

## Value

|                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Group Delay                                                         | Band Selective: 3.1 to 6.0 $\mu$ S, depending on BWA<br>Or After Class A upgrade<br>Channel Selective 150kHz, 11.6 $\mu$ S<br>Channel Selective 100kHz, 14.3 $\mu$ S<br>Channel Selective 75kHz, 16.9 $\mu$ S<br>Channel Selective 62.5kHz, 18.8 $\mu$ S<br>Channel Selective 50kHz, 21.6 $\mu$ S<br>Channel Selective 37.5kHz, 26.3 $\mu$ S<br>Channel Selective 25kHz, 35.8 $\mu$ S<br>Channel Selective 12.5kHz, 63.0 $\mu$ S |
| Maximum Input Power, No Damage                                      | 0dBm (UL), 0dBm (DL)                                                                                                                                                                                                                                                                                                                                                                                                             |
| Maximum Input Power, Normal peration                                | -5dBm (UL), -5dBm (DL)                                                                                                                                                                                                                                                                                                                                                                                                           |
| Connectors                                                          | N(f) as standard                                                                                                                                                                                                                                                                                                                                                                                                                 |
| RF Input/Output impedance                                           | 50                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Uplink squelch function                                             | Yes, user selectable, to avoid UL noise when no carriers present, per band, per time slot and per channel (on Class A mode)                                                                                                                                                                                                                                                                                                      |
| Self diagnostic platform                                            | Microprocessor based                                                                                                                                                                                                                                                                                                                                                                                                             |
| Annunciator                                                         | LED and dry contacts included                                                                                                                                                                                                                                                                                                                                                                                                    |
| Local management and supervising                                    | Local access via USB                                                                                                                                                                                                                                                                                                                                                                                                             |
| RoHS compliance                                                     | Yes                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Power Supply                                                        | AC 110 VAC, 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                             |
| Battery Backup time                                                 | 24hr at maximum consumption with Fiplex provided batteries                                                                                                                                                                                                                                                                                                                                                                       |
| Quantity of Batteries                                               | 2 units                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Batteries Type                                                      | Lead Acid                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Power consumption for 24hr backup calculation                       | 65W or 80W (After Upgrade to 2W)                                                                                                                                                                                                                                                                                                                                                                                                 |
| Maximum AC Power consumption considering fully discharged batteries | 200W                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Housing                                                             | NEMA 4                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Temperature range                                                   | -13° to 131° F • -25° to +55° C                                                                                                                                                                                                                                                                                                                                                                                                  |
| Cooling                                                             | Natural convection                                                                                                                                                                                                                                                                                                                                                                                                               |
| Weight                                                              | 275 lbs (124.7kg) - including batteries                                                                                                                                                                                                                                                                                                                                                                                          |
| Dimension                                                           | 25.5 in (647.50 mm) x 32.5 in (827 mm) x 13.8 in (353 mm)                                                                                                                                                                                                                                                                                                                                                                        |
| FCC ID                                                              | Class A: P3TDH7S-8A<br>Class B: P3TDH7S-8B                                                                                                                                                                                                                                                                                                                                                                                       |
| SGS UL2524 ID                                                       | SGSNA/23/SUW/00030                                                                                                                                                                                                                                                                                                                                                                                                               |

## Product Description

## Ordering Part Number

|                                                                                                                                     |                    |
|-------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| 0.5W/27dBm, 800 (excludes ESMR) + 700 + Band 14 CLASS B, Upgradeable to Class A, 2W/33dBm options, AC. Batteries Included           | HONBDA-7S27B-IB-10 |
| 0.5W/27dBm, 800 (excludes ESMR) + 700 (excludes Band 14), CLASS B, Upgradeable to Class A, 2W/33dBm options, AC. Batteries Included | HONBDA-7S27B-IB-06 |
| 0.5W/27dBm, 800 Full band (includes ESMR)+ 700 + Band 14, CLASS B, Upgradeable to Class A, 2W/33dBm options, AC. Batteries Included | HONBDA-7S27B-IB-18 |

# FLEX All-in-One Solution

## Integrated BDA + Battery Backup + Annunciator

# HONBDA-7S

| Type of License Upgrade                       | Upgrade Ordering Part Number |
|-----------------------------------------------|------------------------------|
| From 0.5W/27dBm Class B to 0.5W/27dBm Class A | BDA-LIC-D27B-D27A            |
| From 0.5W/27dBm Class B to 2W/33dBm Class B   | BDA-LIC-D27B-D33B            |
| From 0.5W/27dBm Class B to 2W/33dBm Class A   | BDA-LIC-D27B-D33A            |
| From 2W/33dBm Class B to 2W/33dBm Class A     | BDA-LIC-D33B-D33A            |
| From 0.5W/27dBm Class A to 2W/33dBm Class A   | BDA-LIC-D27A-D33A            |

### Standards and Codes

The FLEX All-in-One Solution Integrated BDA + Battery Backup + Annunciator units comply with the following standards and codes:

- Buy American Compliant: Meets the definition of Domestic Construction material under the Buy American Act
- FCC (Federal Communications Commission-US)
- IC Approved
- SGS C-UL Compliant
- UL2524 2nd Edition Standard with SGS, Nationally Recognized Testing Laboratory (NRTL) approved by OSHA for UL 2524
- IFC 2015, 2018, 2021 Edition
- NFPA 72 2013 Edition, NFPA 1221 2016 2019 Edition, NFPA 1225 2022 Edition
- ROHS Compliant

This document is not intended to be used for installation purposes.  
We try to keep our product information up-to-date and accurate.  
We cannot cover all specific applications or anticipate all requirements.  
All specifications are subject to change without notice.

### Fiplex

2101 NW 79th Avenue  
Miami, FL 33122  
305 884-8991  
www.fiplex.com

Fiplex® is a registered trademark of Fiplex Communications, Inc.  
©2023. All rights reserved. Unauthorized use of this document is strictly prohibited.

Country of Origin: USA