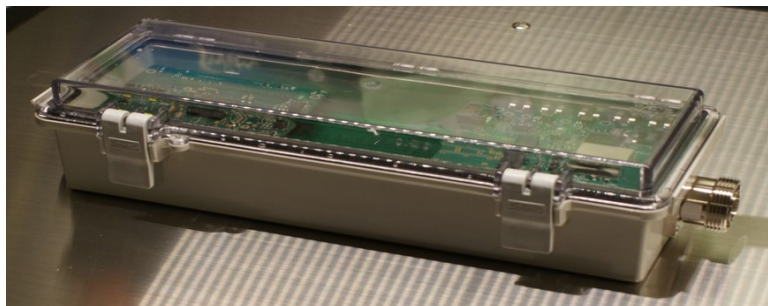# UG23-010 Enhanced *BDA*

This VHF/UHF BDA offers cost effective deployment and useful feature enhancements over traditional, co-market BDAs from other manufacturers.

Enhancement include :

• Automatic gain that works. The BDA can determine cable loss since last amplifier without use of a pilot, and compensate correctly even with a segment fault. This ensures noise floor levels stay at a minimum, improving sensitivity.

• Greater downlink power output to improve DMR and P25 link budgets and lower BER.

• Auto relay bypass in case of power supply or device failure.

• Bluetooth maintenance comms and large , ground readable status display.

• Series cable telemetry

• Up to 500m / 25dB loss per segment

7-16 DIN connectors are used which are robust, tolerant to dirt and water, large and so can be assembled with gloves on, virtually pull-out proof and best of all a standard communications connector.   UHF systems will use native 7-16 DIN while VHF systems will generally use our easy-clamp yellow VHF leaky connector which the cable will stretch before the connector lets go.

These units can be mixed with existing BDAs of all types as a means to improve existing system performance and reliability.

These BDAs are designed and build in Australia at our facility. Both electronics and metalwork are fabricated locally providing complete control over software and hardware, and a high Australian content . All parts used are sourced from official licensed distributors.

Specifications UG23-010 Enhanced BDA

External :
RF Interface : 7-16DIN
Power requirement : 9 to 36 V input
Power consumption : Typical 7 Watts
Enclosure : Polycarbonate
Weight : approx 500 g
Normal operating ambient temperature : -20 to +60 C

RF performance, typical deployed configuration :

Radio frequency range
 - 150/170 or 445/470 std underground mining .
 Bandwidth : Up to 10 MHz TX or RX
Dynamic Range , 12.5kHz communications grade, > 60dB
Maximum RX Input : +10dBm (limiter)
TX output power : +20dBm
Designed maximum segment loss : 25dB

Interaction interfaces : Bluetooth local and up-the-cable telemetry

Options : -HPA, -SFP

Sold and supported by Strata Products Worldwide

Designed and Manufactured in Australia