

# Tagging & Tracking Systems



## Tagging and tracking systems that accurately identifies the location of your personnel and equipment

**PBE Tracking and Tagging systems can be found in over 100 mines around the world and are capable of providing the real time location of underground equipment, personnel and vehicles.**

An integrated system provides valuable tools to managers with extensive data collection capabilities, real-time management abilities and report generation functionality.

Stationary and portable tag readers (wireless or wired) are available for transmitting data over either leaky feeder communication systems (VHF or UHF) or over existing infrastructure (fiber optic, wireless mesh, etc.) without the need to install a new backbone.

PBE's Tracking System can be used with an Emergency Preparedness System, Automatic Personnel Registration or as an Access Control System. ♦

**Safety and productivity improvements provided by a PBE Tracking and Tagging System include:**

- Accurate real-time knowledge of all personnel and vehicles at all times for use in emergency situations
- Physical tag system at the mine surface that only offers binary information (in or out of mine) and is subject to human error is replaced with real-time tracking capabilities
- Enables monitoring of personnel in and out of sensitive areas (e.g. blast zones)
- Asset location and directional tracking to assist with collision avoidance can be included in vehicles
- Ability to enable zonal positioning of all equipment and personnel
- Traffic management and bottleneck identification
- Ability to monitor speed, telemetry, oil pressure, temperature and more of vehicles
- Compatible with Responsible Ventilation by PBE



**PBE**

INNOVATING SAFETY.  
POWERING PRODUCTIVITY.

[pbegrp.com](http://pbegrp.com)

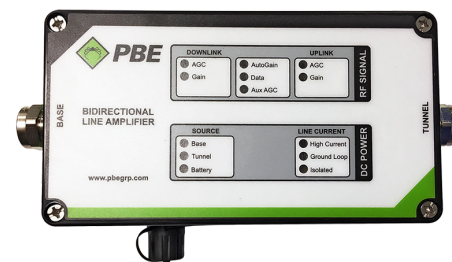


# Tagging & Tracking Systems

**PBE's BDA-4 Amplifier maintains signal levels and can be used as a tag reader, modem and in-line controller**

## THE BIDIRECTIONAL LINE AMPLIFIER (BDA-4):

- Provides remote and local diagnostics to indicate the current state of the amplifier for ease of maintenance
- Supports voice and data transmission, incorporates bidirectional amplifiers and a third auxiliary band
- Is powered from the Leaky Feeder line connected via saddle and clamp connections
- Is housed in a minimum IP55 rated heavy duty enclosure
- Incorporates SAW filter design to increase bandwidth and provide solid and consistent RF performance
- Offers high level of intermod immunity and excellent noise rejection
- Has three Multi-Platform Communications Adapters (MPCA) allowing functionality expansion using PBE modules
- Has wireless and wired interconnectivity



**PBE Vantage offers centralised web based monitoring and control system to maximise safety and increase productivity**



## FEATURE OVERVIEW

- Cutting edge software dashboard in one application for analysis and reporting
- Real-time location and dispatch – knowing who, what, when and where at all times
- Global offsite monitoring available with external intranet access
- Software drivers for multiple manufacturers: PBE Group, AeroScout, Alien, CANPOD, ICOM, Talon
- OPC drivers available

## REAL-TIME LOCATION SYSTEM

- Monitor / Track the real-time location of vital fixed or mobile assets and personnel
- Visually display asset and personnel locations directly on up-to-date mine map images

## VEHICLE MONITORING AND DIAGNOSTICS MODULE

- Monitor vehicle information including oil pressure, runtime (requires CANPOD module in each vehicle)
- Remotely controlled analog and digital outputs
- Ability to transmit over WiFi frequencies

**PBE's PT-TAG is a proximity alert system and tracking tag combined to create an all encompassing tracking solution**

## PBE PT-TAG FEATURES:

- Rechargeable Lithium-Ion battery (charging stations available)
- Tracking (available in 915 or 868 MHz)
- Unique ID for each tag
- Integral Qi Wireless Charger
- Multiple tracking technologies utilized including RFID, tromagnetics, GPS, and RADAR (model dependent)
- Compact size
- Battery capacity, Advisory/Panic Mode, Diagnostic, and Charging LED indicators
- PAS and PBE Vantage (Responsible Ventilation) compatible
- IP66 / NEMA 4 Enclosure



**PBE's Tracking Tag offers full tracking tag functionality and is part of the Vantage personnel and vehicle tracking system**

## TRACKING TAG FEATURES:

- Transmits a unique ID number
- Transmits every second
- Fully encapsulated and MSHA approved
- One to two year battery life
- 100mW max output, 35-50mW average
- Built in "man down" functionality
- Full tracking tag functionality
- Panic and advisory alert functionality
- 924 MHz transmitter frequency
- 3.6 V high energy lithium battery
- 32 bit tag ID



**Locate tagged resources in real time with the PBE High Power Tag Reader, part of PBE's Vantage tracking system**

## TAG READER FEATURES:

- UHF (UHPTR) and VHF (VHPTR) versions available
- Extended tracking range
- Data and power supplied via wired connection
- Operating voltage 24 VDC



## About Us

PBE Group ("PBE") provide an adaptive and flexible integrated solution where a reliance on safety and productivity is essential. PBE is a true global systems provider for the mining, tunnelling, construction and associated markets. Our specialised engineering team integrates our industry specific manufactured products and best in class 3rd party products to ensure a sophisticated, robust and commercially viable solution. Our growth in international markets is based on the key verticals of Technology, Power and Service Delivery – fundamental in any industrial project. Our experience in confined space and underground construction has enabled PBE to complete over 850 projects in more than 60 countries with 320 staff and 18 regional offices. ♦

## Disclaimer

Copyright © 2021 PBE Group Ltd. All rights reserved. This document is protected by copyright belonging to PBE Group Ltd and may not be reproduced in any form republished in whole or part without the prior written or consent of PBE Group Ltd. While every precaution has been taken in the preparation of this literature, PBE Group Ltd assumes no liability for errors or omissions, or from any damages resulting from the use of this information. The contents and product specifications within it are subject to revision due to ongoing product improvements and may change without notice.

PBE/TAGGING-TRACKING/V.1/2021

## Contact Us

For further information please contact.

## AMERICAS

sales.usa@pbegrp.com  
T: +1 276 988 5505

## ASIA

sales.asia@pbegrp.com  
T: +65 6661 6888

## CANADA

sales.canada@pbegrp.com  
T: +1 705 222 0020

## EUROPE

sales.europe@pbegrp.com  
T: +44 203 943 5185

## LATIN AMERICA

sales.lam@pbegrp.com  
T: +56 9 9022 9607

## OCEANIA

sales.aus@pbegrp.com  
T: +61 2 4961 9619

## SOUTH AFRICA

sales.sa@pbegrp.com  
T: +27 12 379 9497



**PBE**

INNOVATING SAFETY.  
POWERING PRODUCTIVITY.

pbegrp.com

