

# BatNode

The BatNode by Sybet International is a portable, intrinsically safe, battery-powered radio transceiver designed for establishing ad-hoc mesh networks in underground environments such as mines and tunnels.

It enables reliable voice and data communication for rescue operations and exploration, with rapid deployment and robust performance in hazardous conditions.



# Technical specification

For a detailed overview of the product’s capabilities, please see the key features listed below. These highlights will provide you with a comprehensive understanding of the advanced functionalities and benefits that our product offers.

## SPECIFICATION

FEATURE	DESCRIPTION
Device Type	Portable, intrinsically safe mesh radio node
Application	Underground rescue, mining, hazardous environments
Weight	500g (1 lb)
Battery Life	Up to 5 days (120 hours) continuous operation
Battery Module	2000 cycles, built-in charger
Power Supply	Internal rechargeable battery
Connectivity	Wireless mesh (+100 nodes), twisted pair (1 km)
Mounting Interval	50 meters (40–60 steps)
Safety	Intrinsically safe; ATEX and MASC certified
Protection	IP67 (dust and water resistant)
Communication	Voice, data, localisation, measurement
Operation	Fully ad-hoc, ready in 10 seconds, LED status indicator
System Integration	Works with ResBase, mPhone, SWAR-2EX system