# JANUS-NC - Multi-Technology Mesh Access Point for Near-Coast Coverage

Institution/Company name	INESCTEC
Contact details	Campus da FEUP
	Rua Dr. Roberto Frias
	4200 - 465 Porto, Portugal
	info@inesctec.pt
	Tel. +351 222 094 000
	Fax +351 222 094 050
Website	http://www.inesctec.pt

## Key words

#### Communications

### Description

Network equipment capable of offering Wi-Fi coverage, while connecting to the Internet via multiple heterogeneous links such as 3G. WiMax and even other Wi-Fi connections.

The devices connect to JANUS via a single stable Wi-F1 connection and the box transparently selects the best connection to the infrastructure depending on temporal conditions.

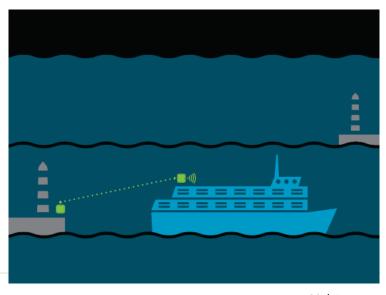
JANUS can form a transparent mesh network that is used to extend a network infrastructure or Internet link to remote locations. via multi-hop wireless links.

JANUS can offer Internet connectivity and services (e.g., VoiP) to passengers on boats near the coast or at the dock. Improved Internet connectivity can be achieved using fiber or ADSL as backhaul instead of 3G/WiMax. It can also be used to provide a dedicated network for nodes of the same entity.

#### **FUNCTIONALITIES**

- Near coast Internet extension
- Self-configured network
- Support for prioritized traffic and QoS
- Support for data storage
- Remote management
- JANUS GPS locationestimated position of network clients

#### **MAIN FEATURES**



- Support for multi-hop and mobile mesh network mode (Wi-Fi)
- Scales to large mesh networks (up to 7000 JANUS boxes)
- o Multiple link layer technologies: 3G. Wi-Fi. WiMax. etc.
- o Stable Wi-F1 connection regardless of the Internet link used
- o Unnecessary network planning: dynamic auto-configuration
- TECHNICAL SPECIFICATIONS
- o Dimensions: 26cm length. 23cm width. 8.8 em height
- o Power: DC jack or passive POE. 7-20 V. 5-6 W
- Supports renewable energy sources (e.g., solar panels)
- o Internal Batteries: 12 V. 7.2 Ah
- Autonomy: -10 hours
- WRAP-BOX is rated NEMA-67 I IP67

# Applicability of Technology to Maritime SMES

Internet connectivity and services (e.g. VoiP) to passengers on boats near the coast or at the dock. Can also be used to provide a dedicated network for nodes of the same entity.