



Homeland Security & Critical Infrastructures

## ELETTRASUITE BS NODE COMPACT

ElettraSuite BS Node Compact is the core of the **Adaptanet®** platform, working either as a high performance 2-carriers TETRA Base Station (BS Node C) or alternatively as a full-featured TETRA Node integrating call control capabilities (BS Node C-TS).

BS Node Compact is a fast deployable, plug & play and state-of-the-art equipment that allows building switchless networks in which voice and end user data are always routed according to a peer-to-peer architecture among the network nodes, thus exploiting all the benefits of full-IP connectivity.

BS Node C-TS allows the deployment of switchless TETRA networks in which the Call Control capabilities are likewise distributed among the network nodes, which is the preferable solution for small and medium sized systems.

BS Node C is the adequate TETRA BS solution for larger switchless networks in which Call Control is kept centralised in a more traditional architecture.

BS Node, supporting TETRA Enhanced Data Service (TEDS), is a future proof solution for any organisation willing to exploit all the benefits provided by the TETRA Release 2 wideband data connectivity.

BS Node is specifically designed in order to support a high level of performance on a 24-hour-a-day basis, even in case of failure of some of the internal modules thanks to redundancy of main modules, links to other network elements and a powerful fallback mode.

### KEY FEATURES

- Direct connection to IP backbone through Ethernet links
- E1 connectivity – 2 Mbit/s (ITU-T G.703/G.704 compliant) as option with drop insert capability
- Supporting switchless call control distributed networks
- Future proof with TEDS (TETRA Enhanced Data Service) capability for wideband data transmission
- Powerful Fallback Mode supporting group/individual calls, data transmission and encryption
- Mountable in standard 19" racks thus being capable of exploiting any existing cabinet for installation and maintenance cost saving

The compact flexible device for ElettraSuite Adaptanet® TETRA IP solution

## TECHNICAL SPECIFICATIONS

Frequency bands	380MHz – 400MHz 410MHz – 430MHz 450MHz – 470MHz 806MHz – 870MHz
Receiver Class	Class A
Static Sensitivity:	-117 dBm minimum guaranteed, TCH 7.2 channels for TETRA carriers including antenna distribution system losses (UHF) ETSI EN 300 392-2 Reference Sensitivity, including antenna distribution system losses (800 MHz)
Dynamic Sensitivity:	-113.5 dBm for TETRA carriers @ LNA input -108 dBm minimum guaranteed for TETRA carriers including antenna distribution system losses Minimum Reference dynamic Sensitivity, as prescribed in ETSI ETS 300-392-2 for TEDS carriers and 800 MHz carriers
Diversity	Dual or triple-diversity
High Speed Data (TEDS)	4-QAM, 16-QAM and 64-QAM modulation schemes 25/50KHz channel bandwidths
Power Supply	-48Vdc (standard and compact version) 220Vac (compact version, as option)
Power Consumption	750W (2 carriers)
Environmental conditions	Operating: according to ETSI ETS 300 019-1-3, class 3.1E (-10 °C to 45 °C) Storage: according to ETSI ETS 300 019-1-1, class 1.2 Transport: according to ETSI ETS 300 019-1-2, class 2.2

### Transmit power

TETRA	ETSI EN 300 392-2 Power Class 2 (25W nominal)
TEDS	ETSI EN 300 392-2 Power Class 4 for (10W nominal)

### Mechanical features

Size	(Height x Width x Depth): 580 x 440 x 480mm (can be housed into a 19" standard rack)
Weight	65Kg (maximum configuration)

### CE Marking

CE Marked	According to R&TTE directive 1999/5/EC
EMC	ETSI EN 301 489-1 and ETSI EN 301 489-18
RoHS	Compliant with ETSI EN 60950 European Directive 2000/53/CE, 2002/95/CE, 73/23/CEE, 93/68/CEE

### Interfaces

Networking	1+1 LAN ports 100/1000Mb for backbone connectivity and supporting port fail-over functionality 2 LAN ports 100/1000Mb (one per SIU) for local connection towards other Network Elements
Control	24 Dry Contacts to collect external alarms (as inputs). 8 Dry Contacts to drive external actuators (as outputs)



For more information please email [infomarketing@selex-es.com](mailto:infomarketing@selex-es.com)

Selex ES S.p.A. - A Finmeccanica Company

Via Tiburtina, Km 12.400 - 00131 Rome - Italy - Tel: +39 06 41501 - Fax: +39 06 4131133

This publication is issued to provide outline information only and is supplied without liability for errors or omissions. No part of it may be reproduced or used unless authorised in writing.

We reserve the right to modify or revise all or part of this document without notice.

2014 © Copyright Selex ES S.p.A.

[www.selex-es.com](http://www.selex-es.com)

SSD MM08084 4-14