



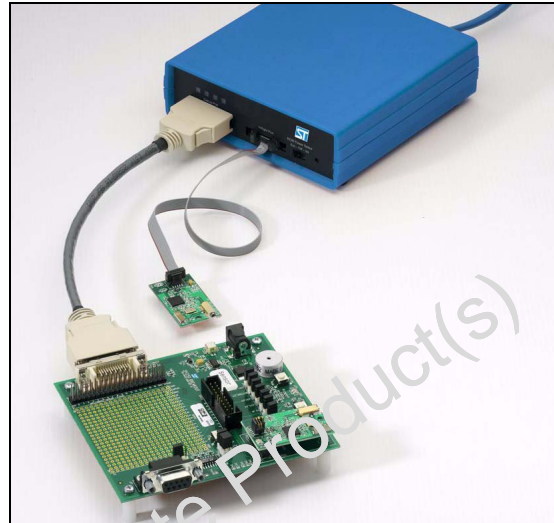
# SNxxx-250, SNISDxxx SNRCM-250, SNXIDE-250, SNINSAD-2X

Complete, full-featured tool kits for  
ZigBee® based networks

Data Brief

## Features

- Breakout boards with SN250 daughter board (8 with SNPRO-250, 3 with SNDEV-250)
- Multiple InSight Adapters (8 with SNPRO-250, 3 with SNDEV-250), Ethernet switch for host PC interface
- EmberZnet™ ZigBee® compliant networking stack
- IDE environment with C compiler and source level debugger
- InSight Desktop PC Development Suite for debug of wireless nodes at protocol stack API level, includes
  - Network analyzer
  - Packet sniffer
  - SN250 firmware download
  - Supports multiple nodes (SNPRO-250 - unlimited, SNDEV-250 - 3)
  - Supports multiple radio events (SNPRO-250 - unlimited, SNDEV-250 - 10,000)
- SN250 application examples
  - Sensor/sink
  - Light/switch
  - Range test
- Training for one person (SNPRO-250)



## Description

The SNDEV-250 Development and SNPRO-250 Professional Kits from Ember are complete, full-featured tool kits that offer all the hardware and software users need for deployment of wireless networks using SN250 microcontrollers for remote monitoring, sensing, and control-network applications based on the ZigBee® standard.

**Table 1. Device summary**

Reference	Part number	Description
<b>For complete development kits</b>		
SNxxx-250	SNPRO-250	8 SN250 nodes, PRO version of InSight Desktop
	SNDEV-250	3 SN250 nodes, DEV version of InSight Desktop
<b>For kit components</b>		
SNINSAD-2X	SNINSAD-2X	InSight Adapter
SNRCM-250	SNRCM250	SN250 radio daughter board
SNXIDE-250	SNXIDE-250	Single user license for xIDE
SNISDxxx	SNISDDEV	Single user license InSight Desktop Development edition, supports up to 3 nodes and 10,000 radio events
	SNISDPRO	Single user license InSight Desktop Professional edition, supports unlimited number of nodes and radio events

# 1 Description

Based on the proven tool solution for Ember's EM250 and EM260 wireless networking devices, the SN250 Development and SN250 Professional Kits provide a complete hardware/software development environment and network system (3 or 8 nodes depending on the kit ordered) that uses the SN250 and the EmberZnet™ ZigBee® advanced wireless protocol stack.

For interface between the host PC during debugging and programming, the kits include InSight Adapters (3 or 8 depending on the kit ordered) with a 10-pin InSight connection to SN250 modules and an Ethernet switch for connection of multiple adapters to a host PC.

The kits facilitate application development with sample applications and a complete software tool set that includes Ember's InSight Desktop with Network Traffic Analyzer to display network and node activity in real time, as well as the xIDE development environment with C compiler for application building and debugging. InSight Desktop is delivered in two editions:

- InSight Desktop Development (SNISDDEV) edition which is included in the SN-250 Development kits, supports up to 3 nodes and 10,000 radio events and includes a 6-month support and maintenance agreement
- InSight Desktop Professional (SNISDPRO) edition which is included in the SN-250 Professional kits, supports up an unlimited number of nodes and radio events and includes a 1-year support and maintenance agreement and a 2-day training for one person

In addition, developers using InSight Desktop Professional or the SN-250 Professional Kit benefit from Ember's hands-on ZigBee® training that includes the following topics and workshops:

- Network topologies and characteristics
- Common messaging models
- Commissioning strategies
- Application structure and stack integration
- Network efficiency
- Tool set use
- Fundamental messaging types
- Sensor network applications
- Distributed control applications
- Power management

## 2 Ordering information

Kits are available from STMicroelectronics (see order codes below) and ST distributors. All tools can be bought separately as spare parts, or as part of a complete starter kit.

**Table 2. Ordering information**

Order code	Description
<b>For complete development kits</b>	
SNPRO-250	8 SN250 nodes, PRO version of InSight Desktop with 1-year support and maintenance agreement and 2-day training
SNDEV-250	3 SN250 nodes, DEV version of InSight Desktop with 6-month support and maintenance agreement
<b>For kit components</b>	
SNINSAD-2X	InSight Adapter
SNRCM-250	SN250 radio daughter board
SNXIDE-250	Single user license for xIDE
SNISDDEV	Single user license InSight Desktop Development edition, supports up to 3 nodes and 10,000 radio events, 6-month support and maintenance agreement
SNISDPRO	Single user license InSight Desktop Professional edition, supports unlimited number of nodes and radio events, 1-year support and maintenance agreement and 2-day training

### For more information

For additional information about STMicroelectronics' SN250 devices including datasheets, user manuals, downloads and support, as well as development kit contents and ordering, please refer to [www.st.com](http://www.st.com).

For details about development kit characteristics, user documentation and tool training, please refer to [www.ember.com/products\\_zigbee\\_development\\_tools.html](http://www.ember.com/products_zigbee_development_tools.html).

## 3 Revision history

**Table 3. Document revision history**

Date	Revision	Changes
14-May-2007	1	Initial release.
21-May-2007	2	Updated cover page and product number information.

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