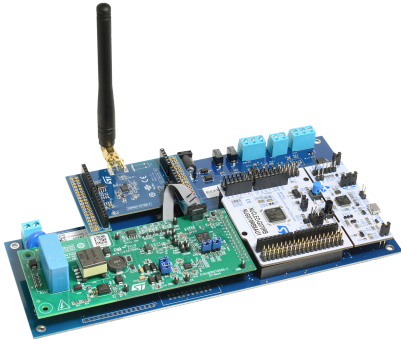


## ST8500 Hybrid PLC&RF connectivity development kit



### Features

- Hybrid PLC&RF connectivity development kit based on ST market-proven and widely used connectivity chipsets ST8500, STLD1 and S2-LP, respectively as protocol controller, PLC line driver and RF transceiver
- Modular board architecture:
  - EVALMODST8500-1, full-feature PLC module based on ST8500 and STLD1
  - X-NUCLEO-S2868A2 for evaluation of RF connectivity in the 863-870 MHz band
  - NUCLEO-G070RB with STM32G070RB microcontroller as programmable application controller and interface to PC thanks to the onboard ST-LINK acting also as USB Virtual COM port
  - ST8500GH-MB base board for module interconnection plus RS485 and CAN bus connectivity to develop Smart Connectivity applications
- 12 V, 1 A universal DC adapter included for easy start and usage
- Easy expansion of the application functionalities through the STM32 Nucleo open development platform, with a wide choice of specialized shields to be connected to the NUCLEO-G070RB

### Application

- Smart Infrastructure
- Smart Industrial
- Smart Metering
- Smart Grid
- Smart City
- Smart Lighting

Product status link

[EVLKST8500GH868](#)

### Description

The EVLKST8500GH hybrid connectivity solution for the ST8500 SoC platform combines the advantages of both PLC and RF technologies to enable applications with the best coverage in any network conditions and topologies.

You can easily explore features and benefits of the ST hybrid PLC&RF solution using the [EVLKST8500GH868](#) kit together with the STSW-ST8500GH firmware and documentation package.

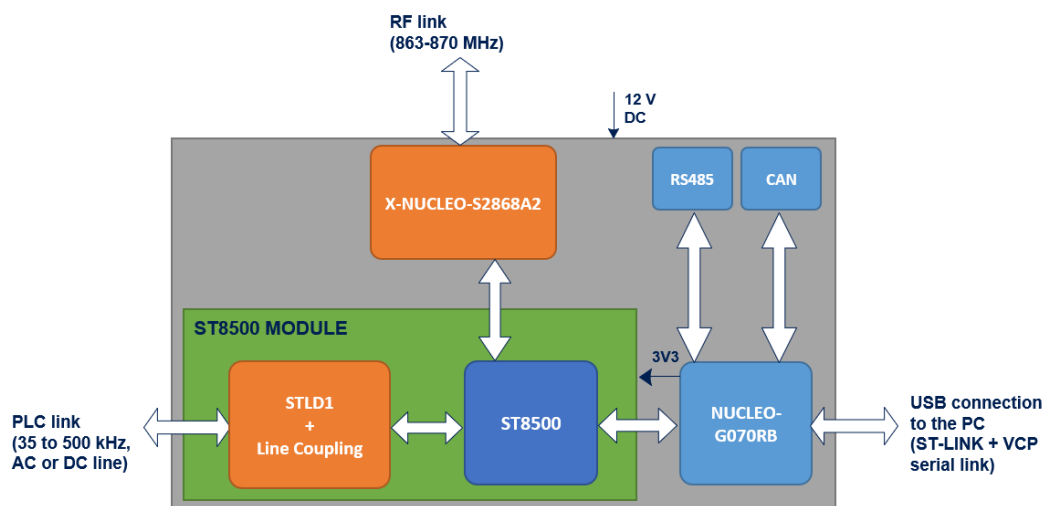
Messages between two nodes in the PLC&RF hybrid network are sent over the best available medium PLC or RF. The media selection for each link in the network is done automatically and adjusted dynamically, enabling highly efficient hybrid mesh networking.

The ST hybrid PLC&RF solution is based on open standards and enables seamless integration into existing G3-PLC networks and adoption in multiple applications and systems.

Note that at least two EVLKST8500GH868 kits must be ordered to test hybrid PLC&RF connectivity between two nodes.

## 1 Block diagram

**Figure 1. Block diagram**



## Revision history

**Table 1. Document revision history**

Date	Version	Changes
12-Nov-2020	1	Initial release.



## Contents

<b>1</b>	<b>Block diagram .....</b>	<b>2</b>
	<b>Revision history .....</b>	<b>3</b>
	<b>Contents .....</b>	<b>4</b>

**IMPORTANT NOTICE – PLEASE READ CAREFULLY**

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. For additional information about ST trademarks, please refer to [www.st.com/trademarks](http://www.st.com/trademarks). All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2020 STMicroelectronics – All rights reserved

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[STMicroelectronics:](#)

[EVLKST8500GH868](#)