Please read this notice before using the TAIYO YUDEN products.

## !\ REMINDERS

Product information in this catalog is as of October 2013. All of the contents specified herein are subject to change without notice due to technical improvements, etc. Therefore, please check for the latest information carefully before practical application or usage of the Products.

Please note that TAIYO YUDEN CO., LTD. shall not be responsible for any defects in products or equipment incorporating such products, which are caused under the conditions other than those specified in this catalog or individual specification.

- Please contact TAIYO YUDEN CO., LTD. for further details of product specifications as the individual specification is available.
- Please conduct validation and verification of products in actual condition of mounting and operating environment before commercial shipment of the equipment.
- All electronic components or functional modules listed in this catalog are developed, designed and intended for use in general electronics equipment.(for AV, office automation, household, office supply, information service, telecommunications, (such as mobile phone or PC) etc.). Before incorporating the components or devices into any equipment in the field such as transportation,( automotive control, train control, ship control), transportation signal, disaster prevention, medical, public information network (telephone exchange, base station) etc. which may have direct influence to harm or injure a human body, please contact TAIYO YUDEN CO., LTD. for more detail in advance.

Do not incorporate the products into any equipment in fields such as aerospace, aviation, nuclear control, submarine system, military, etc. where higher safety and reliability are especially required.

In addition, even electronic components or functional modules that are used for the general electronic equipment, if the equipment or the electric circuit require high safety or reliability function or performances, a sufficient reliability evaluation check for safety shall be performed before commercial shipment and moreover, due consideration to install a protective circuit is strongly recommended at customer's design stage.

- The contents of this catalog are applicable to the products which are purchased from our sales offices or distributors (so called "TAIYO YUDEN's official sales channel").
  - It is only applicable to the products purchased from any of TAIYO YUDEN's official sales channel.
- Please note that TAIYO YUDEN CO., LTD. shall have no responsibility for any controversies or disputes that may occur in connection with a third party's intellectual property rights and other related rights arising from your usage of products in this catalog. TAIYO YUDEN CO., LTD. grants no license for such rights.
- Caution for export

Certain items in this catalog may require specific procedures for export according to "Foreign Exchange and Foreign Trade Control Law" of Japan, "U.S. Export Administration Regulations", and other applicable regulations. Should you have any question or inquiry on this matter, please contact our sales staff.

# Wireless Module

### Our recommended Line Up of Bluetooth®, W-LAN & UWB Module



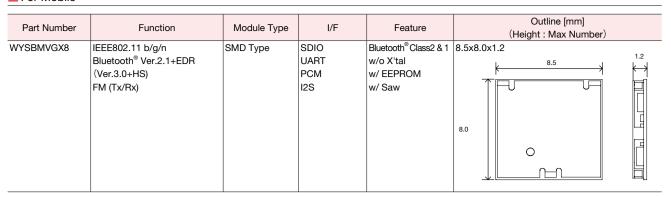




- \*As some of the Wireless Modules listed above are still under development, the specification is subject to change without prior notice. We also have Evaluation Kits for our modules.
- For the latest information, please visit our web site at <a href="http://www.ty-top.com/">http://www.ty-top.com/</a> or feel free to contact our sales department.
- \*\*\*The Bluetooth® word mark and logos are owned by the Bluetooth SIG, Inc. and any use of such marks by TAIYO YUDEN CO., LTD. is under license.

  Other trademarks and trade names are those of their respective owners.

<sup>▶</sup> This catalog contains the typical specification only due to the limitation of space. When you consider the purchase of our products, please check our specification. For details of each product (characteristics graph, reliability information, precautions for use, and so on), see our Web site (http://www.ty-top.com/) .



#### For PC and Enterprise

Part Number	Function	Module Type	I/F	Feature	Outline [mm] (Height : Max Number)
EYSFDCxXX	Bluetooth® 2.1 + EDR	Flash Momory & Connector Type	USB UART PCM	Bluetooth® Class2 w/Connector, Antenna w/X'tal UART(EYSFDCAXX) or USB (EYSFDCSXX)	31x15x3.0
WYSAAVDX7	IEEE802.11b/g/n	Connector Type	SDIO	w/ X'tal w/ EEPROM w/ Antenna	35x15x2.9

### For Digital Consumer

Part Number	Function	Module Type	I/F	Feature	Outline [mm] (Height : Max Number)
EYSF1C*XX	Bluetooth® Ver.2.1+EDR	Flash Memory & SMD Type	USB UART PCM	Bluetooth® Class1 w/ X'tal	23.8x13x2.5
EYSF3C*XX	Bluetooth® Ver.2.1+EDR	Flash Memory & SMD Type	USB UART PCM	Bluetooth® Class2 w/ X'tal	15.4x10x2
EYSFCNZZX	Bluetooth® Smart Module	BLE Master & Slave SMD Type	UART	w/CPU Antenna	12.9x9.6

<sup>▶</sup> This catalog contains the typical specification only due to the limitation of space. When you consider the purchase of our products, please check our specification. For details of each product (characteristics graph, reliability information, precautions for use, and so on), see our Web site (http://www.ty-top.com/) .

Part Number	Function	Module Type	I/F	Feature	Outline [mm] (Height : Max Number)
WYSBCVGXA	IEEE802.11b/g/n Bluetooth® Ver.2.1 + EDR (Ver.3.0 + HS)	SMD Type	SDIO UART PCM	Bluetooth® Class2 & 1 w/ EEPROM w/ X'tal	9.0x8.8x1.35
WYSBCVGX7	Wireless LAN Module W-LAN 802.11b/g/n	SMD Type	UART	w/X'tal SDIO	9.0x8.8x1.35 9.0
WYSBMVGXB	IEEE802.11a/b/g/n Bluetooth® Ver.2.1 + EDR (Ver.3.0 + HS)	SMD Type	SDIO UART PCM	Bluetooth® Class2 & 1 w/ EEPROM w/o X'tal	13.1x6.1x1.35
WYSBMVGX4	IEEE 802.11a/b/g/n	SMD Type	SDIO	w/ EEPROM w/o X'tal	13.1x6.1x1.35
WYSBCVJXM	Combo Module (BT+WLAN) W-LAN 802.11a/b/g/n	SMD Type supported 2x2 Antenna	UART	Bluetooth® 4.0 SDIO,USB	12.5x16.8x1.65
EYSMAC*XX	Bluetooth® Ver.2.1+EDR	Mask ROM SMD Type	USB UART PCM	Bluetooth® Class2 w/ EEPROM w/ X'tal	8.1x9.2x1.6
GYSFFMAXB	GPS NMEA Module NMEA OutPut	SMD Type	UART	w/ TCXO w/ RTC w/ LNA w/ Saw	10.8x10.0x2.0 10.0 10.0 10.0 10.0 10.0 10.0 10.0 1
GYSFFMAXC	GPS&GLONASS Full Module NMEA OutPut	SMD Type	UART		10.8x10.0x2.0

<sup>▶</sup> This catalog contains the typical specification only due to the limitation of space. When you consider the purchase of our products, please check our specification. For details of each product (characteristics graph, reliability information, precautions for use, and so on), see our Web site (http://www.ty-top.com/) .