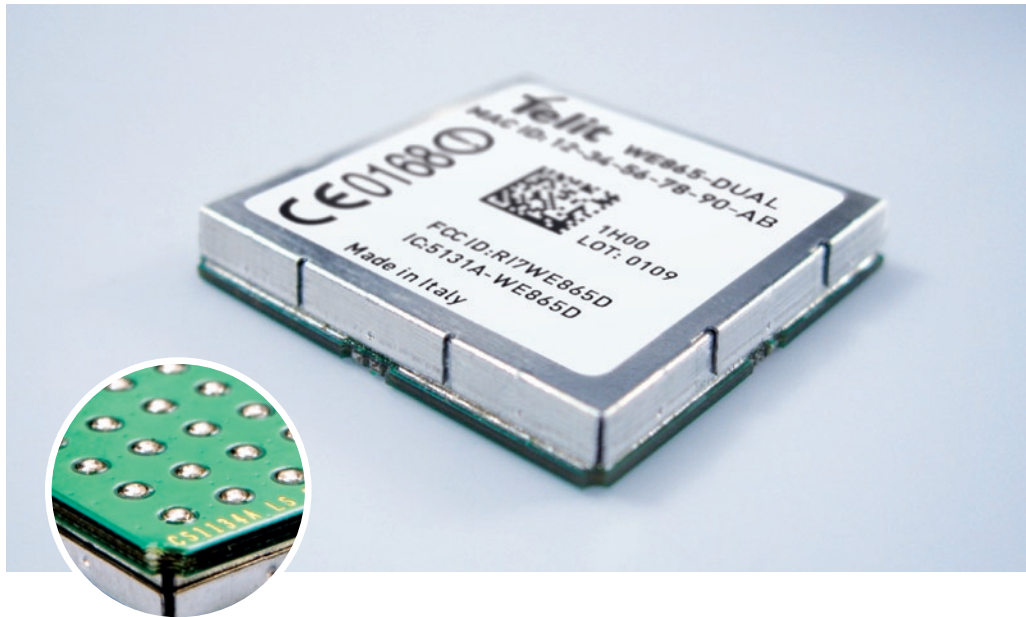


Short Range



WE865-DUAL

Accessory for
GE863-PRO³



PRO³ Accessory
Unified Form Factor

BGA Package

Wi-Fi
CERTIFIED[®] DUAL Standard
Wi-Fi™ (b/g)

AdHoc & Infrastructure
Connection Mode

54
Mbit/s 54 Mbits/s

SDIO Interface

Multi-Mode Wireless
Encryption Support

RoHS Compliant

Extended
Temperature Range

Extended
RF Sensitivity

Configurable Output
Power Level

Multiple Regulatory
Domains Supported

The WE865-DUAL is a Wi-Fi CERTIFIED™ IEEE 802.11 b/g short range wireless companion product to the PRO³ device family. WE865-DUAL is a versatile and powerful addition to any PRO³-based design instantly adding the power of wireless communications and the versatility of the SDIO interface. At only 22mm square and no more than 3.5mm high, the diminutive dimensions also provide for a highly compact integrated customer solution.

The unique Ball-Grid-Array (BGA) package based on solder balls placed on the underside of a module which allows for direct mounting to the application circuit board, without the need for plugs, cables, or connectors. The WE865-DUAL can be assembled using an automated pick-and-place assembly as with standard SMD components. This not only reduces material costs, but also installation time and assembly costs. The board-to-board BGA mounting is extremely stable and reliable. Together, the compact shape and reduced assembly costs are crucial advantages for use in cost-sensitive applications, such as those for the consumer market.

As a part of Telit's corporate policy of environmental protection, all products comply to the RoHS (Restriction of Hazardous Substances) directive of the European Union (EU Directive 2002/95/EG).

Product features

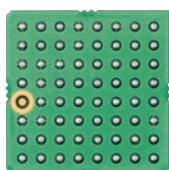
- IEEE 802.11 b/g standard (14 channels)
- Operating supply voltage: 3.4–4.2 V DC (3.8 V DC recommended)
- Maximum output power:
 - 802.11b: 18dBm
 - 802.11g: 16dBm
- Typical RX sensitivity
 - 802.11b: -87dBm @ 11Mbps (11dB margin on top of spec)
 - 802.11g: -72dBm @ 54Mbps (7dB margin on top of spec)
- Direct control from GE863-PRO³ Linux platform over a dedicated library
- Hardware support for multi-mode encryption:
 - WEP 40/64
 - WEP 104/128
 - AES
 - TKIP
- Dimensions 22mm x 22mm x 3.5 mm
- 63 ball BGA grid
- RoHS compliant
- Extended temperature range -20°C to +85°C (operational)
- 9 different regulatory domains
- 8 different output power levels



Making machines talk.®

WE865-DUAL

Accessory for
GE863-PRO³



actual size

Interfaces

- SDIO interface

Approvals

- Fully type approved conforming with R&TTE directive
- Conforms to usage constraints in 2.4GHz band in North America
- CE, FCC, IC

CCK (DSSS) modem

- Supports 1, 2, 5.5 and 11Mbps rates

OFDM modem

- Supports 6, 9, 12, 18, 24, 36, 48, 54Mbps rates

Security Protocols

- WEP
- WPA™/WPA2™
(Personal and Enterprise with EAP methods)

Radio

- Integrated direct conversion receiver
- Baseband for 2.4GHz
- Fast AGC and wide dynamic range allow excellent robustness against fading
- High cellular blocking for good coexistence with cellular radios in the GE863-PRO³ Cellular Module family
- On-board LNA for excellent receiver sensitivity
- On-board power amplifier (PA)

Additional features

- On-board switching DC/DC and LDO
- On-board EEPROM
- On-board crystal
- Dynamic power saving

Order-No.

Please contact your Telit representative
for order codes and all further information



Telit Communications S.p.A.
Via Stazione di Prosecco, 5/B
I-34010 Sgonico (Trieste), Italy
Tel +39 040 4192 200
Fax +39 040 4192 289
E-Mail: EMEA@telit.com

Telit Wireless Solutions Inc.
3131 RDU Center Drive, Suite 135
Morrisville, NC 27560, USA
Tel +1 888 846 9773 or +1 919 439 7977
Fax +1 888 846 9774 or +1 919 840 0337
E-Mail: NORTHAMERICA@telit.com

Telit Wireless Solutions Inc.
Rua Cunha Gago, 700 - cj 81, Pinheiros
São Paulo - SP, 05421001, Brazil
Tel +55 11 2679 4654
Fax +55 11 2679 4654
E-Mail: LATINAMERICA@telit.com

Telit Wireless Solutions Co., Ltd.
9th Fl., Daewoo Securities Bld.
34-3 Yeouido-dong, Yeongdeungpo-gu
Seoul 150-716, KOREA
Tel +82 2 368 4600
Fax +82 2 368 4606
E-Mail: APAC@telit.com

www.telit.com

Distributed by: