Bluetooth®

16 mm

36 mm

Product Brief OEMSPA311/331

The OEM SERIAL PORT ADAPTER™
311/331 series is a complete set
of different Bluetooth modules
specially designed to make the
integration an easy task.

Key Features
• Small in size
• Compatible Short Range and Long Range modules
• Designed for high performance/throughput
• Configurable for short latency/delay
• AT Command support
• Wireless LAN co-existence support
• Configuration over Bluetooth
• Bluetooth Qualified as Product (Bluetooth version 2.0)
• Radio Type Approved for Europe, US and Canada
• Compliant with EMC, Safety and Medical standards
• Lead Free and RoHS compliant
• Only high quality components used
• Internal antenna or external antenna connector
• Different connector and mounting options
• Module can be soldered directly on to host PCB
• Industrial and Automotive temperature range -30 - +85°C
• Individually tested and tuned in production
• Custom configuration possible

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Technical Data

SPECIFICATIONS

Bluetooth Support
Bluetooth version 2.0 (Qualified and Listed as Product)
Supported Bluetooth Profiles:
  Generic Access Profile (GAP)
  Serial Port Profile (SPP)
  Dial-up networking Profile (DUN GW, DUN DT)

OEMSPA311i/x: Class I +7 dBm (10 - 150 m)
OEMSPA331i/x: Class I +17 dBm (>300 m)

Bluetooth Chipset and Stack
Product based on Philips well known BGB203 chipset
and Philips Embedded Stack

Software
All software is included in the module.
Configurable locally or over Bluetooth using
AT Commands or PC Wizard

Serial Interface
UART Logic-Level
Supported baud rates: 300 – 921.6k
Support for non-standard baud rates
Flow control: CTS/RTS or none

Power Supply
OEMSPA311i/x: 3.0 - 6.0 VDC
OEMSPA331i/x: 3.3 - 6.0 VDC
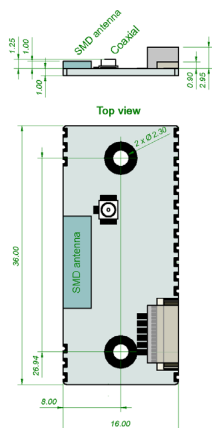
Current Consumption
OEMSPA311i/x:
  Min:1.0 mA
  Average: 17 mA
  Max: 70 mA (Peak)

OEMSPA331i/x:
  Min:10 mA
  Average: 22 mA
  Max: 170 mA (Peak)

Dimension/Size (Typically)
16 x 36 x 3 mm

CE 0678

Type Approval
R&TTE (Europe)
FCC/CFR 47 part 15 unlicensed modular transmitter approval
IC (Industrie Canada)

Environmental
Maximum operating temperature: -30 - +85 °C
Storage temperature: -40 - +85°C
Humidity RH 5-90% non-condensing
Shock and vibration: IEC 61131-2

Certifications and Compliance
R&TTE Directive 1999/5/EC
EN 300 328 V1.6.1 (2004-11)

EMC Directive: 89/336/EEC
EN 301 489-1 V1.4.1 (2002-08)
EN 301 489-17 V1.2.1 (2002-08)
EN 61000-6-2 (2001)

Safety Compliance
EN 60950-1:2001 and/or IEC 60950-1:2001 (1st Edition)
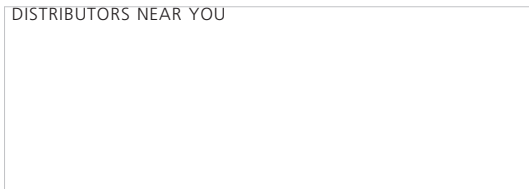EN 60950-1/A11:2004 + Corrigendum:2004

Medical Electrical Equipment
IEC 60601-1-2 (2001)

Order Number

cB-OEMSPA311i-01	OEM Serial Port Adapter 311i Complete Kit (Starter Kit)
cB-OEMSPA311i-04	OEM Serial Port Adapter 311i Internal Antenna and Standard Connectors
cB-OEMSPA311i-06	OEM Serial Port Adapter 311i Internal Antenna and JST Connector
cB-OEMSPA311x-04	OEM Serial Port Adapter 311x External Antenna and Standard Connectors
cB-OEMSPA311x-06	OEM Serial Port Adapter 311x External Antenna and JST Connector
cB-OEMSPA331i-04	OEM Serial Port Adapter 331i Internal Antenna and Standard Connectors
cB-OEMSPA331i-06	OEM Serial Port Adapter 331i Internal Antenna and JST Connector
cB-OEMSPA331x-04	OEM Serial Port Adapter 331x External Antenna and Standard Connectors
cB-OEMSPA331x-06	OEM Serial Port Adapter 331x External Antenna and JST Connector

DISTRIBUTORS NEAR YOU

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