Bluetooth Serial Adapter, Promi-SD101/202/205



Features

- * Provides transparent RS232 serial cable replacement.
- * Supports Bluetooth Serial Port Profile and Generic Access Profile.
- * Interoperability with PDA, laptops etc.
- * Working distance:

Promi-SD101: Class 2, Nom. 30 meters,

up to 300m using patch antenna

Promi-SD202: Class 1, Nom. 100 meters,

up to 1000m using patch antenna

Promi-SD205: Class 1, Nom. 100 meters,

up to 1000m using patch antenna

- * Easy to use Windows configuration tool available.
- No external drivers required.

Panel Layout

Promi-SD Series is a wireless serial adapter product line based on Bluetooth technology. Promi-SD Series enables RS232-based serial devices to communicate wirelessly throughout the range of 30m ~ 300m (Promi-SD101-Class 2) or 100m ~ 1000m (Promi-SD202/205-Class 1).

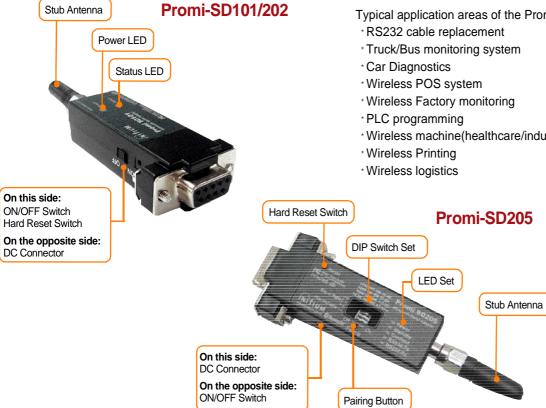
Users may configure the Promi-SD Series by using easy-to-use Windows-based utility software or by using standard AT command set.

Using the Promi-SD205's DIP-switch, user can simply configure Baud Rate and Hardware Flow Control settings of the Promi-SD205. Pairing-button enables 2 Promi-SD205's to connect automatically.

Their various power supply configurations allow users to choose which options suits them best, i.e. Power by DC power cable, Power by external DC adapter, Power by USB power cable, Power by pin 9 of DB9 connector.

Typical application areas of the Promi-SD Series include:

* Wireless machine(healthcare/industrial) monitoring





Promi-SD101/202/205

Specifications

Serial Interface:

- * Promi-SD101:
- · RS232, Female DB9, 1200 to 115 Kbps
- · CTS/RTS flow control: Default
- · DTR/DSR is not available
- Promi-SD202/205:
- · RS232, Female DB9, 1200 to 230 Kbps
- · CTS/RTS flow control: Default
- · DTR/DSR for loop-back & full transfer

Bluetooth Interface:

- Promi-SD101
- · Bluetooth v1.1
- · Class 2
- · Level 4 dBm
- · Protocols RFCOMM, L2CAP, SDP
- · Profiles General Access Profile, Serial Port Profile
- · Working distance
 - Default Antenna Default Antenna 30 meters
 Default Antenna Dipole Antenna 50 meters
 Dipole Antenna Dipole Antenna 80 meters
 Patch Antenna Dipole Antenna 150 meters
 - Patch Antenna Dipole Antenna 150 meters Patch Antenna - Patch Antenna 300 meters
- * Promi-SD202/205:
- · Bluetooth v1.1
- · Class I
- · Level 18 dBm
- · Protocols RFCOMM, L2CAP, SDP
- · Profiles General Access Profile, Serial Port Profile
- Working distance
- Default Antenna Default Antenna 100 meters
 Default Antenna Dipole Antenna 150 meters
 Dipole Antenna Dipole Antenna 200 meters
 Patch Antenna Dipole Antenna 400 meters
 Patch Antenna Patch Antenna 1,000 meters

Configuration:

- PromiWin, PromiWizard
- Modem AT command set

Diagnostic LED:

- * Promi-SD101/202
- Status and Power LED
- * Promi-SD205:
 - · Power
 - Standby
 - Connect
 - RS232-Tx
 RS232-Rx

Power:

- * Promi-SD101:
 - · 5V, minimum 150mA
- nominal power consumption of 35.3mA@9600bps and 40mA@115Kbps speed
- Promi-SD202/205 :
- · 5V~12V, minimum 150mA
- nominal power consumption of 40mA@9600bps and 72mA@115Kbps speed
- * Common Power supply options:
- · Power via a standard AC-plug DC-adapter
- · Power via USB power cable
- · Power via DC power cable
- · Power via pin 9 of DB9 connector

Environmental:

- * Operating temperature:
 - 0 c to 50 c
- * Storage temperature:
- -20 c to 66 c
- * Humidity: 90% Non-condensing

Physical properties:

* Dimension (L x W x H) 91x 31 x 16 (mm) 3.8 x 1.2 x 0.6 (in.)

Certification:

- * Bluetooth 1.1
- * FCC, CE

Warranty:

* 1-year limited warranty

Ordering Information

SD101 Promi-SD101 Serial-Bluetooth Adapter-Class 2 with internal rechargeable battery

SD202 Promi-SD202 Serial-Bluetooth Adapter-Class 1
SD205 Promi-SD205 Serial-Bluetooth Adapter-Class 1-DIP

Includes:

- * DPA: Promi-DPA DC power cable for SD series
- * UPA: Promi-UPA USB Power Cable
- * SAT: Promi-SAT Stub Antenna-SMA Male-Left Handed
- * CD-ROM

Optional Accessories:

* OPA: Promi-OPA External Power Adaptor-International - 4 types: EU, America, UK, Australia OR

EPA: Promi-EPA External Power Adaptor-220V - Korea

* SPC: Promi-SPC Serial Power Cable + Power Adapter



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* DAT : Promi-DAT Dipole Antenna-SMA Male-Left Handed

* PAT : Promi-PAT Patch Antenna-SMA R/A Female-Right Handed

* RFC: Promi-RFC 1m Antenna Extension Cable for all antennas

Embedded Serial-Bluetooth Module, Promi-ESD01/02





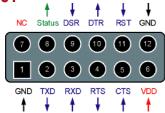
- * Output Interface UART, Compliant Bluetooth Specification v1.1
- * Receiving Signal Range -84 to -20dBm
- * Compact size Promi-ESD01: 27 x 27 x 14(mm),

Promi-ESD02: 18 x 20 x 11.7 (mm)

- * Provides transparent RS232 serial cable replacement.
- * Supports Bluetooth Serial Port Profile and Generic Access Profile.
- * Interoperability with PDA, laptops etc.
- * Working distance:
 - · Promi-ESD01: Class 1, Nom. 100 meters, up to 1000m using patch antenna
 - · Promi-ESD02: Class 2, Nom. 30 meters,
- * Easy to use Windows configuration tool available.
- * No external drivers required.

Pin Assignment Information

Promi-ESD01



| Pin no. | | Direction | Description | Signal Level | |
|---------|--------|-----------|--|--------------|--|
| 1 | GND | I | Power Ground | Ground | |
| 2 | TXD | 0 | UART data out | TTL | |
| 3 | RXD | 1 | UART data input | TTL | |
| 4 | RTS | 0 | UART Ready to Send | TTL | |
| 5 | CTS | ı | UART Clear to Send | TTL | |
| 6 | VDD | 1 | DC input (3.0 ~ 3.3V) | Power | |
| 7 | NC | ı | No Connection | - | |
| 8 | Status | 0 | Bluetooth Connect Detect (Active Low) | TTL | |
| 9 | DSR | 1 | Data Set Ready | TTL | |
| 10 | DTR | 0 | Data Terminal Ready | TTL | |
| 11 | RST | ı | Reset (Active Low) | TTL | |
| 12 | GND | 0 | Power Ground | Ground | |

Promi-ESD Series is an Embedded Serial-Bluetooth Module type product line based on Bluetooth technology. Promi-ESD Series is designed for integration into user devices by on-board installation. They are connected to the device via built-in UART interface and communicate with other Bluetooth device.

Promi-ESD Series enables RS232-based serial devices to communicate wirelessly throughout the range of 30m (Promi-ESD02-Class 2) or 100m ~ 1000m (Promi-ESD01-Class 1).

Users may configure the Promi-ESD Series by using easy-to-use Windows-based utility software or by using standard AT command set.

Typical application areas of the Promi-ESD Series include:

- * RS232 cable replacement
- * Truck/Bus monitoring system
- * Car Diagnostics
- * Wireless POS system
- * Wireless Factory monitoring
- * PLC programming
- * Wireless machine (healthcare/industrial) monitoring
- * Wireless Printing
- * Wireless logistics

| Promi-ESD02 | | Ante | enna | | |
|-------------|--------|------|------|-----|----------|
| - | GND | 1 | 8 | RXD | — |
| - | VDD | 2 | 7 | TXD | - |
| ← | Status | 3 | 6 | RTS | - |
| - | RST | 4 | 5 | CTS | + |

| Pin no. | Pin name | Direction | Description | Signal Level |
|---------|----------|-----------|--|--------------|
| 1 | GND | ı | Power Ground | Ground |
| 2 | VDD | ı | DC input (3.0 ~ 3.3V) | Power |
| 3 | Status | 0 | Bluetooth Connect Detect (Active Low) | TTL |
| 4 | RST | ı | Reset (Active Low) | TTL |
| 5 | CTS | ı | UART Clear to Send | TTL |
| 6 | RTS | 0 | UART Ready to Send | TTL |
| 7 | TXD | 0 | UART data out | TTL |
| 8 | RXD | ı | UART data input | TTL |



Embedded Serial-Bluetooth Module,

Promi-ESD01/02

Specifications

Serial Interface:

- Promi-ESD01:
 - UART Interface, 2.54mm Header 2x6, 1200 to 230 Kbps
 - · CTS/RTS flow control: Default
 - · DTR/DSR for loop-back & full transfer
- Promi-ESD02:
 - · UART Interface, 2.54mm Header 1x4x2, 1200 to 230 Kbps
 - · CTS/RTS flow control: Default
 - · DTR/DSR is not available

Bluetooth Interface:

- Promi-ESD01:
- Bluetooth v1.1
- · Class I
- · Level 18 dBm
- · Protocols RFCOMM, L2CAP, SDP
- · Profiles General Access Profile, Serial Port Profile
- · Working distance

Default Antenna - Default Antenna 100 meters Default Antenna - Dipole Antenna 150 meters Dipole Antenna - Dipole Antenna 200 meters Patch Antenna - Dipole Antenna 400 meters Patch Antenna - Patch Antenna 1,000 meters

- * Promi-ESD02:
 - · Bluetooth v1.1
 - · Class 2
 - · Level 4 dBm
 - · Protocols RFCOMM, L2CAP, SDP
 - · Profiles General Access Profile, Serial Port Profile
 - · Working distance Nominal 30 meters

Configuration:

- * PromiWin, PromiWizard
- * Modem AT command set

- 3V~3.3V, minimum 150mA
- nominal power consumption of 26mA@9600bps and 29mA@115Kbps speed

Environmental:

- Operating temperature:
- 0 c to 50 c
- Storage temperature:
- -20 c to 66 c
- Humidity: 90% Non-condensing

Physical properties:

- * Promi-ESD01
 - 27x27x14(mm)
- · 1.06 x 1.06 x 0.55 (in.)
- * Promi-ESD02
 - 18x20x11.7(mm)
 - · 0.7 x 0.78x 0.47 (in.)

Certification:

- Bluetooth 1.1
- * FCC, CE

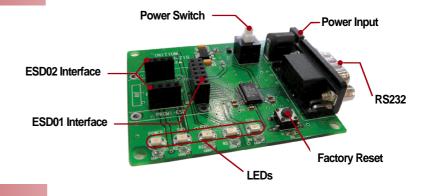
Warranty:

* 1-year limited warranty

Promi-DBS Starter Kit

Promi-DBS Starter Kit includes the evaluation board with the sample circuitry for Promi-EDS01/02 interface, power, Bluetooth status, reset. LED for user device development.





Ordering Information

Promi-ESD01 Embedded Serial-Bluetooth Module-Class 1 ESD01

Includes:

- SAT: Promi-SAT Stub Antenna-SMA Male-Left Handed
- * EEC: Promi-EEC 15cm Antenna Extension Cable for ESD01

Optional Accessories:

EAT : Promi-EAT Board-Type Antenna 犡

- * DAT: Promi-DAT Dipole Antenna-SMA Male-Left Handed
- * PAT: Promi-PAT Patch Antenna-SMA R/A Female-Right Handed
- * RFC: Promi-RFC 1m Antenna Extension Cable for all antennas

Promi-ESD02 Embedded Serial-Bluetooth Module-Class 2 with On-board Antenna. Promi-DBS Starter Kit for Promi-ESD01/02

DBS Includes:

ESD02

- Jig board
- DC Power Adapter
- Serial data cable
- CD-ROM

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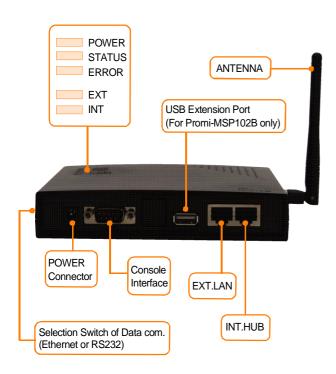
Bluetooth/IP Gateway for multi-port wireless connections,

Promi-MSP102A/102B

Features

- * Connects Bluetooth devices to 10/100 base-T Ethernet.
- * Supports multi point connectivity
- · Promi-MSP102A: Up to 7 Bluetooth connections
- · Promi-MSP102B: Up to 14 Bluetooth connections
- Supports data rate of Max. 723 Kbps with greater than 150m range.
- * Supports Bluetooth profiles for Serial Port, LAN Access, PAN and Dial up Networking.
- * Easy-to-use COM-Port redirector support
- Ideal wireless solution for the replacement of the wired multi-port serial card.
- * Supports HTTP/FTP/Telnet/IP sharing/DHCP/PPP/RADIUS Authentication/SNMP.
- * Easy to use Windows configuration tool available.

Panel Layout





The Promi-MSP Series enables multiple Bluetooth devices to connect to the Ethernet network simultaneously and without delay when they are within range. The Promi-MSP Series provides Class 1 Bluetooth wireless connectivity to Ethernet/Fast Ethernet. It supports all Bluetooth devices compatible with the Bluetooth Profiles for the Serial Port, Dial-up Networking, LAN Access and PAN. Along with the Serial Port Profile support, the Promi-MSP Series is the ideal solution for the replacement of the wired serial port application.

The Promi-MSP Series supports versatile host modes for various user applications, i.e. TCP Server and Client modes for TCP/IP-Bluetooth replay applications, Vertex mode for multicasting, Repeater mode, Serial Hub mode and RS232 mode. The Promi-MSP Series runs on embedded Linux operating system, with Flash memory for easy software upgrades, and built-in Web server and Web interface for quick installation, and remote configuration and management. The Promi-MSP Series uses the RADIUS protocol for user authentication.

Typical application areas of the Promi-MSP Series include:

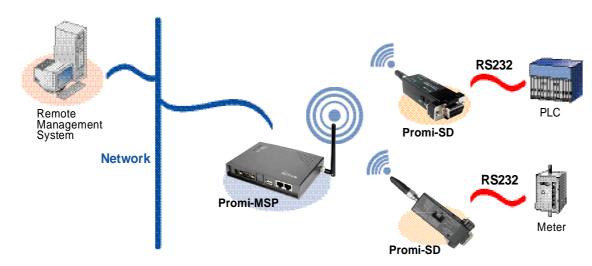
- * Truck/Bus monitoring system
- * Car Diagnostics
- * Wireless POS system
- * Wireless Factory monitoring PLC programming
- * Wireless machine (healthcare/industrial) monitoring
- * Wireless Printing
- * Wireless logistics



Bluetooth/IP Gateway for multi-port wireless connections,

Promi-MSP102A/102B

Application Diagram



Specifications

Ethernet Interface

- * 10/100 Base Ethernet with RJ45 connector
- * Supports Static IP and Dynamic IP address

Bluetooth Interface:

- * Bluetooth v1.1
- * Class I
- * Level 18dBm
- * Profiles
- Serial Port, LAN Access, PAN, Dial up Networking
- * Working distance:

Promi-MSP - Promi-SD202/205

Dipole Antenna - Stub(Default) Antenna up to 150m
Dipole Antenna - Dipole Antenna up to 200m
Dipole Antenna - Patch Antenna up to 400m
Patch Antenna - Patch Antenna up to 1000m

Network Protocols

- * HTTP, FTP, Telnet, DHCP client
- * SNMP v1/v2/v3
- * PPP server and PPP tunneling
- * RADIUS

Management

- * Windows Utility
- * Web, Telnet, Serial Console
- * Modem AT command set

Diagnostic LED

* Power, Status, Error EXT, INT

Power

- * 5VDC
- * 2A@ 5V

Environmental

- * Operating temperature: 0°C to 50°C
- * Storage temperature: -20°C to 66°C
- Humidity:90% Non-condensing

Physical properties

* Dimension (L x W x H) 147 x 112 x 32 (mm) 5.8 x 4.4 x 1.3 (in.) 225q

Approvals

* FCC, CE

Warranty

* 1-year limited warranty

Ordering Information

MSP102A Promi-MSP102A Bluetooth/IP Gateway with 7-port support Promi-MSP102B Bluetooth/IP Gateway with 14-port support

Includes:

- * DC Power Adapter
- * DAT: Promi-DAT Dipole Antenna-SMA Male-LeftHanded
- * Serial data cable
- * Ethernet cross cable
- * CD-ROM
- * USB extension dongle : For Promi-MSP102B only

Optional Accessories:

- * PAT : Promi-PAT Patch Antenna-SMA R/A Female-Right Handed
- * RFC: Promi-RFC 1m Antenna Extension Cable for all antennas

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