# Bluetooth Serial Adapter, Parani ™ SD1000



#### **Features**

- Bluetooth Specification v2.0 + EDR
- Provides transparent RS232 serial cable replacement - Supports up to 4 multiple simultaneous connections
- Supports up to 4 multiple simulateous connection - Basic Transmit Power: Max. +18dBm,
- EDR Transmit Power: Max. +6dBm
- Receiving Sensitivity: -88dBm(0.1%BER)
- Supports Bluetooth profiles SPP(Serial Port Profile)
- Interoperability with PDA, laptops etc.
- Supports firmware upgrade via windows-based software (ParaniUpdater)
- Working distance ( In an open field ): Nom. 100 meters, up to 400m using 5 dipole antenna
- Enhanced portability: standard & extended battery pack options
- Easy to use Windows configuration tool available.
- No external drivers required.

# Panel Layout



**The Parani-SD1000** is a Class1 type of Bluetooth Serial Adapter that supports 100 meters of wireless transmit distance by default. The Parani-SD1000 has an extension option so that users can extend the transmit distance up to 400 meters using 5 dipole antennas. It supports Bluetooth v2.0+EDR specification. Parani-SD1000 has two battery-pack options, standard and extended battery pack. By these options, Parani-SD1000's portability is more enhanced. The Parani-SD1000 also supports up to 4 multiple simultaneous connections.

Typical application areas of the Parani-SD1000 include:

- RS232 Cable Replacement
- Truck/Bus Monitoring System
- Car Diagnostics
- Wireless POS System
- Wireless Machine(Healthcare/Industrial) Monitoring
- Wireless Factory Monitoring
- PLC Programming
- Wireless Printing
- Wireless Logistics



# Bluetooth Serial Adapter,

# Parani<sup>™</sup> SD1000

## **Specifications**

#### Serial Interface

- Serial speed up to 921.6kbps

- CTS/RTS flow control, DTR/DSR for loop-back & full transfer

#### **Bluetooth Interface**

#### - Bluetooth v2.0 + EDR

- Class 1

#### - Profiles - SPP - Working distar

Norking distance (in open field)		
-	SAT-G01R	100 meters
-	DAT-G01R	150 meters
-	DAT-G01R	200 meters
-	DAT5-G01R	300 meters
-	DAT5-G01R	400 meters
	•	<ul> <li>SAT-G01R</li> <li>DAT-G01R</li> <li>DAT-G01R</li> <li>DAT-G01R</li> <li>DAT5-G01R</li> </ul>

[Antennas]

SAT-G01R: +1dBi Stub Antenna DAT-G01R: +3dBi Dipole Antenna DAT5-G01R: +5dBi Dipole Antenna

Max. Tx power: +18dBm

Receive Sensitivity: -88dBm

#### Configuration

- ParaniWin, ParaniUpdater
- Modem AT command set

#### Diagnostic LED

- BT Status (mode)
- Connect
- RS232-RX/TX
- Charging/Done (Battery Charging/ Battery Charging completed)
- Low Battery

#### Power

- Power input: 5~12VDC
- Power Consumption: Minimum 2mA, Maximum 80mA

#### **Battery Pack**

- Capacity
- · 240 mAh(standard)
- 900 mAh(extended) - Charging Power: minium 5V/200mA
- Charging Time
- · Approximately 2 hours (standard)
- · Approximately 5 hours (extended)
- Battery life (Test based on 9600 bps data loopback. Actual battery life
- varies by configuration, operating conditions and other factors)
- · Approximately 4.5 hours (standard)
- · Approximately 16.5 hours (extended)

#### Environmental

- Operating temperature: -40°C to 85°C
- Storage temperature: -40°C to 85°C
- Humidity: 90% Non-condensing

#### **Physical properties**

- Dimension (L x W x H)
- · 76 x 31 x 16 (mm) (No battery pack)
- $\cdot$  76 x 31 x 19.5 (mm) (with standard battery pack)
- · 76 x 31 x 31.4 (mm) (with extended battery pack)
- Weight
- · 24g (No battery pack)
- $\cdot$  30g (with standard battery pack)
- $\cdot$  42g (with extended battery pack)

# Certification

- FCC, CE, KC, TELEC, IC, Bluetooth SIG

#### Warranty

- 3-year limited warranty

### Ordering Information

#### Single Pack SD1000-A1 Includes

- SD1000: SD1000 Bluetooth-serial adapter

#### Single Pack SD1000-00 Includes

- SD1000: SD1000 Bluetooth-serial adapter
- DPA-G01: Parani-DPA DC power cable for SD series
- UPA-G01: Parani-UPA USB Power Cable
- SAT-G01R: 1 dBi Stub Antenna RP-SMA Plug Right-hand Thread
- FM9GD-G01: DB9 Female to Male Gender Changer

#### Single Pack SD1000-01 Includes

- Single pack SD1000-00
- OPA-G01: Parani-OPA External Power Adaptor-International 4 types: EU, America, UK, Australia

Stub antenna NOT included

#### Bulk Pack SD1000-B10 Includes

- SD1000(×10EA): SD1000 Bluetooth-serial adapter
- SAT-G01R(×10EA): 1 dBi Stub Antenna RP-SMA Plug Right-hand Thread
- DPA-G01(×10EA): Parani-DPA DC power cable for SD series

#### **Optional Accessories**

- SAT-G01R: 1 dBi Stub Antenna RP-SMA Plug Right-hand Thread
- DPA-G01: Parani-DPA DC power cable for SD series
- UPA-G01: Parani-UPA USB Power Cable
- OPA-G01: Parani-OPA External Power Adaptor-International 4 types: EU, America, UK, Australia
- BPC-G02: Parani-BPC standard Battery Pack for SD1000
- BPC-G03: Parani-BPC extended Battery Pack for SD1000
- DAT-G01R: 3 dBi Dipole Antenna RP-SMA Plug Right-hand Thread
- DAT5-G01R: 5 dBi Dipole Antenna RP-SMA Plug Right-hand Thread
- SEC-G01R: 15cm Extension Cable(For SAT-G01R / DAT-G01R / DAT5-G01R)
- FM9GD -G01: DB9 Female to Male Gender Changer



For more information, please visit us at http://www.ParaniSerial.com

