

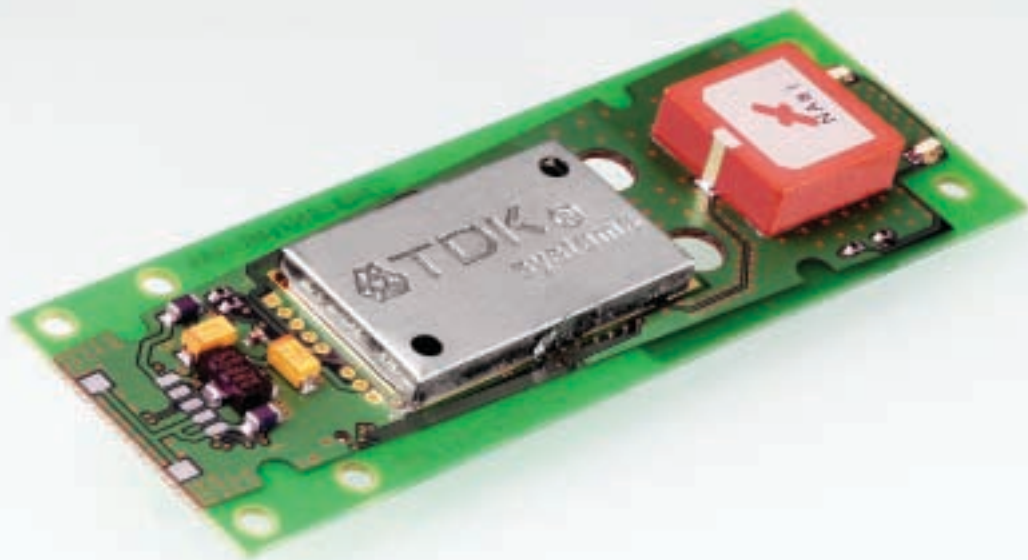
blu²ⁱ

 **TDK**[®]
systems

innovative Bluetooth solutions

 Bluetooth™





integrated an

The blu²ⁱ range allows:

- Reduction in time to market
- Flexibility in wireless interconnection
- Competitive differentiation
- Reduction of development costs
- Integration of new technology without specialist knowledge
- Access to the experience of a recognised leading technology partner

blu²ⁱ from TDK Systems allows virtually any product, existing or in development, to be enhanced with wireless connectivity – adding flexibility and increasing value to customers.

blu²ⁱ – simply integrated intelligence.

d intelligent

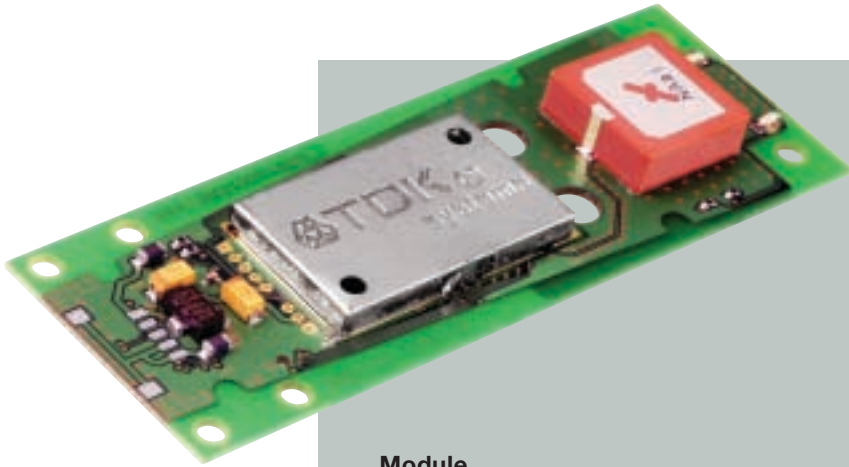
ready and relevant



- Innovative – the only range of its kind
- Bluetooth 1.1 pre-qualified – eliminates approval timescales and costs
- Common industrial interfaces make for easy integration
- Requires no host Bluetooth software stack
- No Bluetooth knowledge required
- Hayes AT-style command protocol
- Data-transfer rates of 200Kpbs (typical)
- Range includes serial profile and can be upgraded to support DUN or headset profiles*
- Robust design

*DUN and headset profiles must be separately approved in conjunction with the manufacturer's hardware

form and function



Module

A Bluetooth module for integration in host systems

- 2 analogue lines – configurable as input or output
- 69x24mm in size
- Development kit available



RS232 Adaptor

An external Bluetooth RS232 interface adaptor

- Enables any device with an RS232 serial interface to communicate over Bluetooth
- Attaches to DTE or DCE interfaces
- Standard DB-9 serial connector



USB Adaptor

An external Bluetooth USB interface adaptor

- Enables any device with a USB interface to communicate over Bluetooth
- Powered by USB interface
- Supplied with self-adhesive mounting pad



PCMCIA Adaptor

An internal Bluetooth PCMCIA interface adaptor

- Enables any device with a PCMCIA interface to communicate over Bluetooth
- Type II format
- Integrated antenna avoids external pods

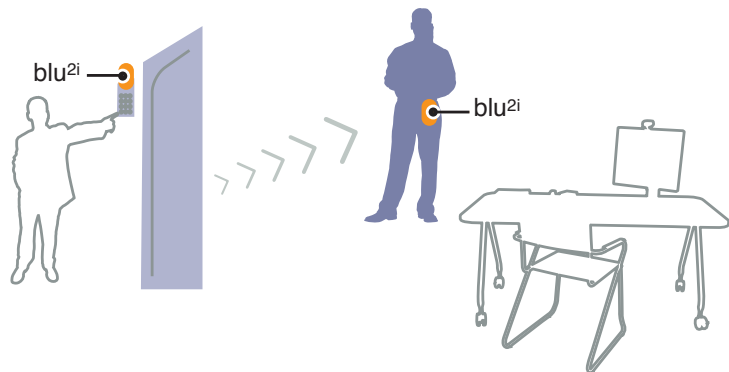


RS232-Powered Adaptor

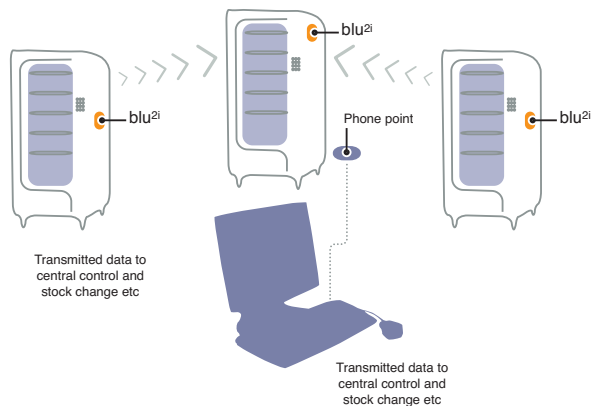
An external RS232-powered interface adaptor

- Burst transfer duration of 5 minutes
- Ten years life expectancy
- Rated at IP65

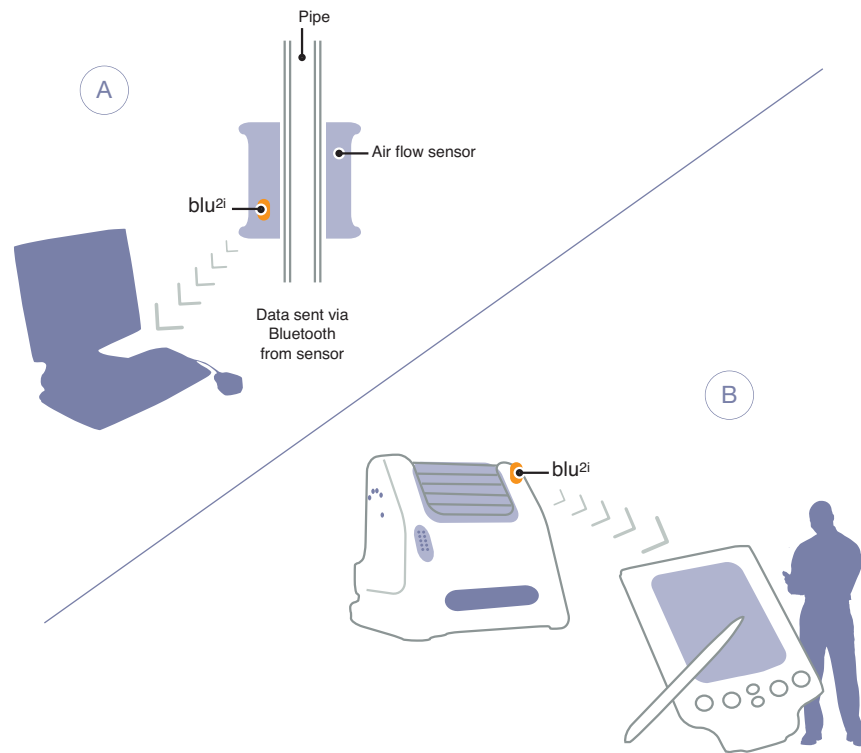
Bluetooth entry phone system



Vending machine control and replenishment



Bluetooth remote monitoring



These application notes are engineering concepts designed to educate users about the potential of Bluetooth and are provided in good faith. Users wishing to implement them should check that no third party patents are infringed before commercialisation.

| Feature | Implementation |
|------------------------|-----------------------------|
| Bluetooth transmission | Class 1 |
| Frequency | 2.400 – 2.485 Ghz |
| Max transmit power | +6dBm |
| Min transmit power | +0dBm |
| Receive sensitivity | Better than -85dB |
| Antenna gain | +2dBi |
| Range | 200m |
| Data transfer rate | 200Kbps (typical) |
| Interfaces | RS232 USB PCMCIA |
| Baud rate | Configurable from 9600bps |
| Signalling | DTR, DSR, DCD, RI, RTS, CTS |

| Feature | Implementation |
|-------------------------------|--|
| Status indication by LED | Power on Data transfer Device is discoverable NB – varies between devices |
| Fully Bluetooth pre-qualified | Bluetooth 1.1 product listing |
| Current consumption | Less than 36mA during data transfer Configurable low power mode |
| Temperature range | Normal operation: -20°C to +75°C |
| Interface levels | 3.3V |
| Audio | Audio can be transferred over SCO channels through the PCM interface at 64Kbps |

All information correct at time of going to press. Specifications are subject to change.

pioneers in mobile connectivity

Simply integrated intelligence. Visit www.blu2i.com

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