PCMCIA Adaptor

Features

- Powerful class 1 Bluetooth 'plug-in' device
- fully approved standalone product – no approvals cost
- powerful TDK Terminal control centre
- TDK Configuration utility
- simple AT style command set control
- integrated antenna with up to 100m[1] range
- field upgradeable
- remotely configurable
- status LEDs
- Supported profiles – Serial, DUN[2]
- Fully compatible with amongst others Windows XP, Mac OS and embedded systems

Overview

blu[2i] PCMCIA Adaptor is the simplest method of upgrading any host with PCMCIA interface to Bluetooth Wireless Technology®. The adaptor takes advantage of TDK Systems' pre-approved blu[2i] Module and is controlled with the unique AT based command set.

With excellent ranges up to 100m[1] the blu[2i] PCMCIA Adaptor can connect to any Bluetooth device supporting the same profile; it can be used a cable replacement solution, a secure network connection via VPN or a remote monitoring / diagnostics device.

By presenting itself as a serial device the blu[2i] PCMCIA Adaptor can be installed on most operating systems by using standard operating system installed serial device drivers.
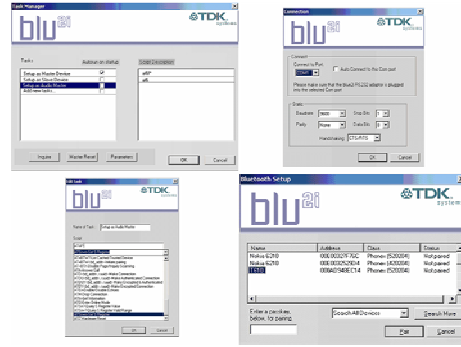
Target application areas

- cable replacement
- retail
- monitoring and diagnostics
- healthcare
- automotive
- secure VPN access

Key benefits

- less design time required
- excellent mobility between installations
- plug and play
- easily configured

TDK Configuration and TDK Terminal utilities

- Total control at a glance
- Easy to follow scripting
- Pair and connect
- Commissioning tool

Specifications

Hardware 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	100m free space[1]
Data Transfer rate	Up to 230Kbps (device should be preset to 115Kbps)
Physical size	102 x 54 x 5 (mm) – 30g
Fully Bluetooth pre-qualified	Bluetooth 1.1 product listing
Current consumption	100mA with idle mode (46mA)
Temperature Range	-20°C to +75 ^{o}C
Status lights	Indicating data transfer and connection states
Physical connection	16bit PCMCIA
Supported OSs (Applications)	Windows 98SE, 2000, ME and XP

Feature	Implementation
Fully Bluetooth approved	The blu^{2i} PCMCIA Adaptor is fully approved as a Bluetooth end product.
TDK Terminal control centre	Full of useful tools that help you understand, configure and change the way the blu^{2i} PCMCIA Adaptor works
TDK Configuration utility	Configure the blu^{2i} PCMCIA Adaptor using one of the scripts provided or create our own
Remotely configurable	Configuration of S Registers and other parameters possible from a remote device, such as a second bu^{2i} PCMCIA Adaptor.
Future proofed	The blu^{2i} PCMCIA Adaptor's firmware is field upgradeable
Onboard memory	Ten non-volatile 32 bit memory locations are available for general purpose use by the host and accessible through the S Register interface
Configurable UART	The onboard UART can be configured for either low latency or maximum throughput at baud rates from 1200 to 921600
Profile support	DUN[2], Serial
Status LEDs	The blu^{2i} PCMCIA Adaptor's two LEDs can be configured for different modes of operation e.g. to show Bluetooth connection state

[1] Free space range is dependent of the location, the type and number of other wireless devices in the area
[2] Must be approved in conjunction with manufacturer's hardware

TDK systems