Plug&Play Phone2GPRS Bridge

Connect Wired Data Modem to GPRS Cellular Network

BridgeD130

The BridgeD130 is a flexible and cost-effective solution for easily connecting legacy devices with embedded analog dial-up modems to the digital wireless GPRS network.

The BrigdeD130 is a plug-and-play PSTN to GPRS gateway that does not require any changes to the host/connected equipment : simply unplug the phone jack from the wall socket and plug it into the BridgeD130 Phone Network Emulation Input socket.

The data previously transferred over the modem link is automatically transmitted over IP frames on the GPRS cellular network. The BridgeD130 can also run a customized embedded application able to process and analyze the data before relaying it over the GPRS netrwork.

Bidirectional

The BridgeD130 connects to the GPRS when the attached modem dials. An incoming call can be generated on specific GPRS activity detection.
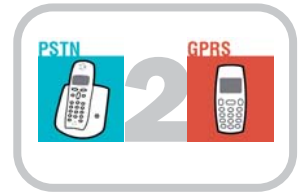
Cost Savings

Switching devices to GPRS subscriptions allows to benefit from adapted billing and to use flexible high bandwidth Internet access at the central server site.

GPRS Connection

The internal eDevice TCP/IP stack allows the embedded class10 GPRS modem to attach to the network, obtain an IP address and manage TCP connections.

PSTN Emulation

The BridgeD130 reproduces the behavior of the wired analog phone network (FXS interface) by generating dialtone, busy tone, ring signal...

Demodulation

The attached device drives its internal modem as if it were still connected to the PSTN network. The BrigdeD130 demodulates the flow to extract the data.

Plug & Play

For IP-based data transfer, no changes are required for the server. For raw data transfers, eDevice's software emulates modems removed from the server.

e◊device
TECHNOLOGY

Connecting Devices

www.edevice.com

BridgeD130

⟩ Hardware

> 2187 Analog Devices 16 bit DSP

> 16 Mbit Flash Memory

> RJ11 POTS/FXS interface, DB9 used for configuration

> Power Supply 8-15V, Rechargeable 6V Battery

> Dimensions [w] 160 [d] 80 [h] 60 mm

> Operating Environment: 0 to + 45°C

> LEDs indicating GSM Signal Strength

> Alternative DIN Rail or IP65 Casing

## ⟩ PSTN/Wired

> Standard Network Termination Emulation (POTS) with Dialtone generation

> V21, V22, V22bis, V23, V32, V32bis and V34 modem support

> ISP Modem mode with internal PPP Server to relay IP frames originated by the device

> Transparent Modem mode to transfer raw data issued by the modem through TCP tunnel

> GSM Gateway mode to use GSM Data connection (CSD) instead of PSTN

⟩ GPRS/Wireless

> Class10 GSM/GPRS modem

> Maximum speed : 85.6kbps downlink / 42.8kbps uplink

> Automatic GPRS attachment

> SIM card holder, SMA antenna connector

> RFC-compliant TCP client and server

> Embedded Web Server

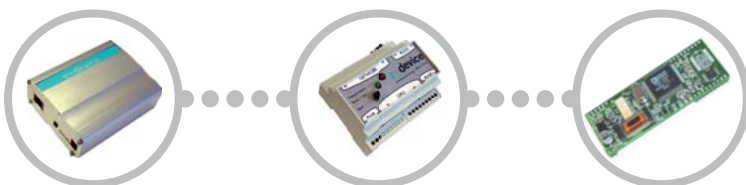> Dynamic DNS client

> Remote control over GPRS network
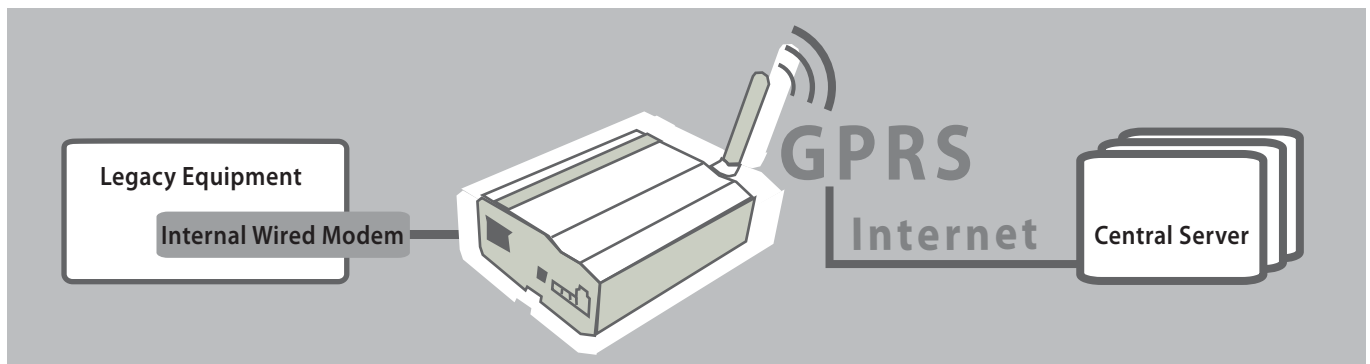
The BridgeD130 is the easiest way to switch legacy equipment from traditional phone landlines to the wireless GSM/GPRS network. The phone network cable is connected directly to the BridgeD130 that extracts the payload data from the modem flow.

For raw data transfers (transparent point-to-point modem communication), the BridgeD130 operates through a TCP tunnel on the Internet network to automatically transfer the payload data in both directions. When installed on a central server, the TCP Serial Bridge software supplied by eDevice emulates the removed modem bank thus no changes are required on the server.

When the legacy device already connects to Internet through an ISP, the BridgeD130 acts as a Remote Access Server running a PPP Server. The IP frames issued by the TCP/IP stack are left unchanged and transferred through GPRS to the central server which does not require any adaptation.

For both modes it is also possible to replace PSTN/POTS calls by GSM Data calls. The data can also be analysed by customizable scripts embedded on the BridgeD130 able to manage the specific device protocol to decide whether a GPRS connection is needed or not.

More than 2 Million Products in the Field

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