



## eDbox-100

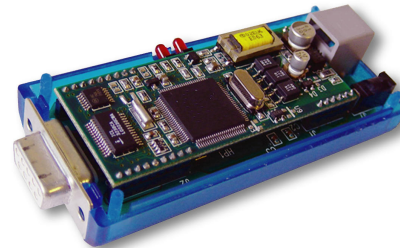
## SmartStack™ for PSTN

The **eDbox-100** from eDevice is an easy to use add-on hardware package. This box allows Original Equipment Manufacturers (OEMs) to add Internet connectivity to any device via a standard telephone line (PSTN - public switched telephone network).

Based on widely available components such as a small-footprint international DAA and a DSP from the Analog Devices 218x family, the eDbox-100 combines both hardware and software modules to manage a PSTN connection, PPP negotiation and Internet protocols such as IP, TCP, POP3, SMTP, HTTP and FTP.

The **eDbox-100** uses **SmartStack™** technology to simultaneously execute the modem and the TCP/IP stack on the same component. As a result, both footprint and cost are greatly reduced compared to solutions based on several processors.

eDevice provides Internet-enabling solutions that establish or improve remote management of ordinary devices and equipment. eDevice's **SmartStack** technology is the foundation for a low-cost family of flexible software and hardware products for Internet connectivity. For further information on **SmartStack** technology or purchasing our products, please visit our web site at [www.edevice.com](http://www.edevice.com).

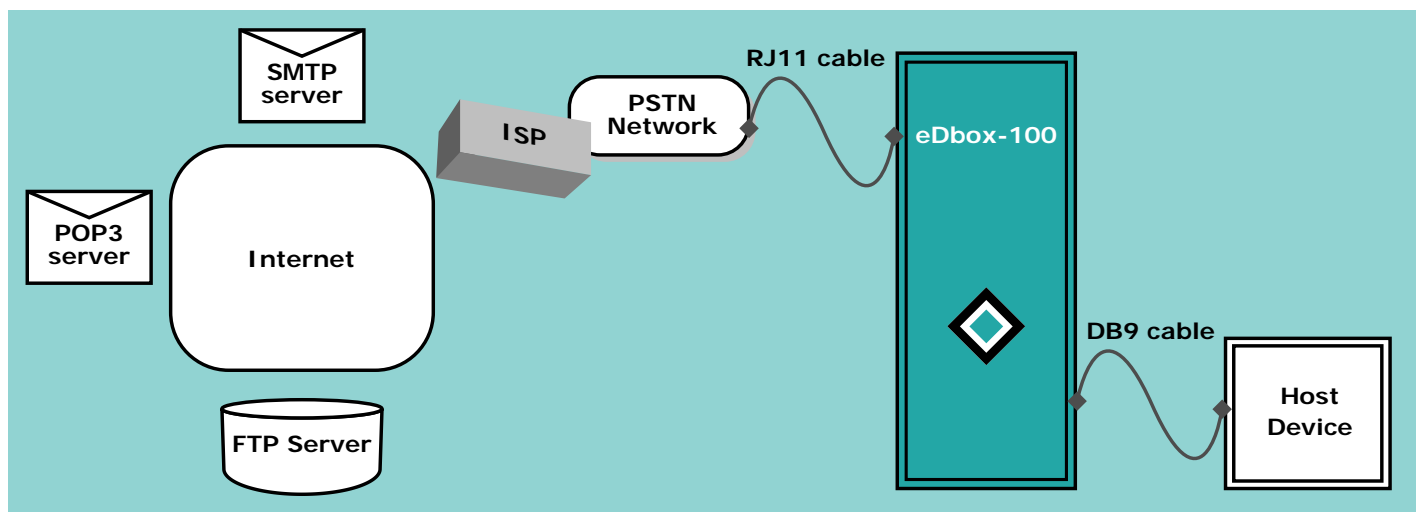


### eDbox-100 PRODUCT HIGHLIGHTS

- ⌚ Uses industry standard RS-232 serial port to connect with your equipment
- ⌚ Includes a telephone line interface to connect devices directly to the Internet via a standard telephone line (PSTN - public switched telephone network)
- ⌚ Suggested for devices that do not need an "always-on" Internet connection
- ⌚ No dedicated telephone line necessary
- ⌚ Well suited as an add-on hardware solution
- ⌚ Macro language (via SDK) for advanced development

### Applications

consumer electronics, automatic dialers, kiosks, point-of-sale terminals, security systems, surveillance, metering, office equipment, medical equipment, vending machines, household appliances, remote monitoring, IP phones, pay phones, automotive analyzers, cable & set-top boxes,  $\mu$ controller firmware updates

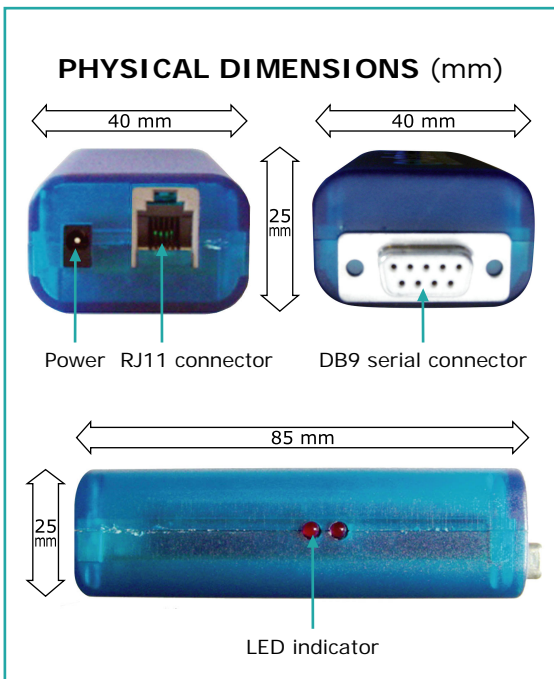


## SOFTWARE INTERFACE

Engineers accustomed to the standard Hayes AT commands supported by standard analog modems will be pleased to discover the *eDevice AT# Command Set*. These intuitive commands allow any host device to control and configure the **eDbox-100** through a standard serial port quickly and easily.

The *eDevice AT# Command Set* is the same one used in all **SmartStack** products, including the various available networks such as Ethernet and GSM. As a consequence, only a few code adaptations will be required to allow the user to adapt the device to another network medium.

With only two or three commands users can send an email or retrieve a file from an FTP server. The **eDbox-100** deals with all the networking layers automatically.



## eDbox-100 TECHNICAL SPECIFICATIONS

### Hardware Description

16 bit DSP	ADSP-2187L, 52 Mips, 160 kBit on chip RAM
Flash Memory	8 Mbit (non-volatile storage of parameter values and code) International DAA
Network Interface	RJ11 female
Network Connector	ITU-T V.32bis, V.34 and V.90
Modem Modulations	ITU-T V.23 / Bell 202
Caller ID	5V DC
Power Supply	<120 mA (typ., connected)
Power Consumption	Temperature Range (Commercial):
Operating Environment	0°C to +45°C Temperature Range (Industrial): -20°C to +60°C
Hardware Interface	DB9 female RS-232 serial connector
Physical Dimensions	85 x 40 x25 mm (L x W x H)
Safety Certifications	EN 60950
Telecom Certifications	FCC Part 68, TBR21, JATE
EMC	FCC Part 15 (Class B), EN 55022, EN 55024, EN 61000-3-2, EN 61000-3-3

### Host Communication

Flow Control	Software Xon/Xoff Hardware RTS/CTS
Interface	eDevice AT# command set AT Hayes command set (subset)

### Protocols

PPP	RFC compliant , LCP, IPCP PAP authentication
IP v4	Mail client POP3 & SMTP FTP client Telnet HTTP server NTP client TCP socket interface Remote Control Feature (over Telnet)

### Ordering Information

Model	Description
eDbox-101	SmartStack Box for PSTN, V.32bis, RS-232
eDbox-102	SmartStack Box for PSTN, V.34, RS-232
eDbox-103	SmartStack Box for PSTN, V.90, RS-232
eDbox-123	SmartStack Box for PSTN, V.34/ V.90, JATE-Japan, RS-232

### Related Documentation

- [eDbox-100 Users' Guide](#)
- [eDevice AT# Command Set](#)
- [eDevice AT# Parameter Set](#)
- [Application Notes](#)