



eFlex 500 sign

Data Sheet

General Information

This document outlines hardware and firmware specifications as well as technical drawings including mechanical applications. At the end of the document you will find information about wireless applications and mounting details as well as service and maintenance.

eFlex 500 panel is driven by battery and wireless communication and can only be used together with the eFlex Bounce software installed on a local PC or server. The panel updates the information displayed by automatically communicating with the eFlex Bounce software. Between the updates the panel “sleeps” to give maximum lifetime for the battery. Throughout this document measurements will be given in both millimetres and inches. The metric measurements are exact whereas the English standard is calculated and therefore shown in brackets: 25.4 [1.00]

eFlex 500 Panel Version

The eFlex 500 panel is only available in a flat landscape version, but as wall mounted as a separate unit, the panel can be used in both landscape and portrait mode.

Technology

The bi-stable displays and wireless communication with a minimum of power consumption are the basic technologies. The bi-stable displays are characterized by the fact that they only require power during the minutes where the display is being updated. The technology used in eFlex is called Matrix and is a technology developed specifically for the eFlex signs to reduce the power consumption to an absolute minimum.

As a result of the combination of these two technologies the battery in an eFlex sign has a minimum life of 5 years or 10,000 updates.

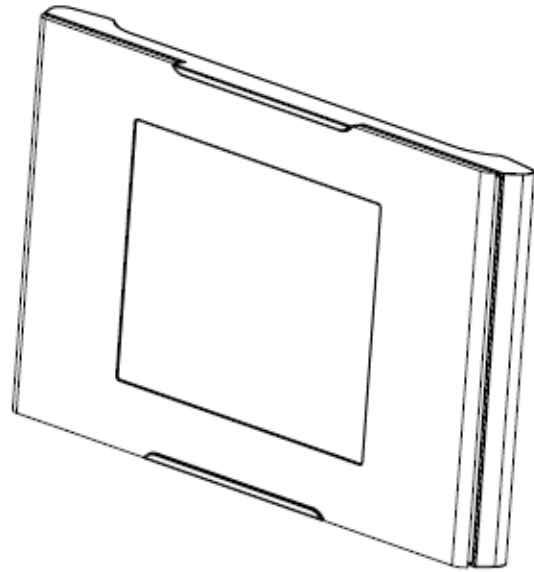
The Matrix technology has also been developed to cover a long distance of 30 m+. It is however limited by the frequencies, transmitting intensities allowed and some parts of the architecture of the building.

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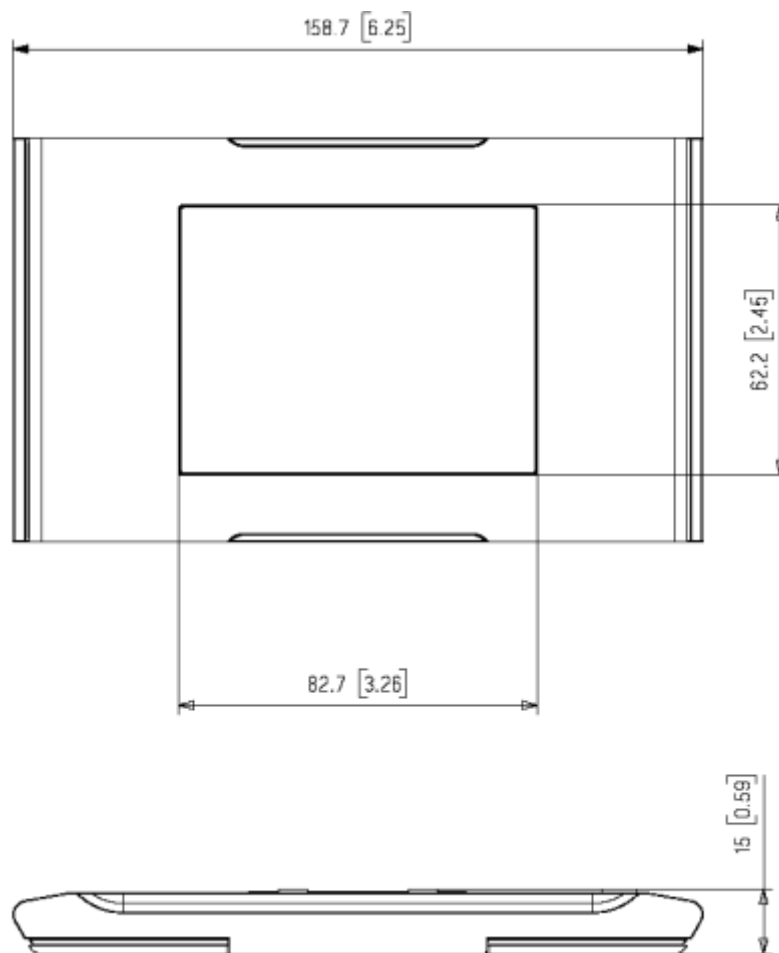
Hardware and Panel Specification

	PC Hardware and SW requirements
Processor	Minimum 1.2 Ghz
Memory	Minimum 512 Ram
Disk space	Minimum 4 GB
	OS (Operating system)
	MS Windows XP Pro (SP2) 32 bit
	MS Windows Vista Business 32 bit
	MS Windows 7 Pro 32 bit
	USB HUB for up to 4 Bounce on one Bounce Software (PC)
	Belkin F5L009
	eFlex 500 Bounce
Hardware	Developed for eFlex
Wireless	Matrix
System	Unlicensed ISM band
Frequency	868 – 915 Mhz
Modulation	GFSK Modulation
Encoding	Manchester encoding
TX Power	10dMb (5mW ERP)
RX Sensitivity	-100dBn@0.1%BER
Data rate	25kbs
Antenna	Internal ¼ wave(dipole (+db gain)
Range	Free air >200 m typically, Buildings maximum 100 m, typically 30 m and one floor up and one floor down depending on building structure.
Battery	3 Volt Lithium Cell
Battery lifetime	5 years or 10000 updates
	eFlex 500 Panel
Panel type	Bistable LCD monochrome panel
Active area	Width 82,2 mm, hight 61,7 mm
Resolution	320 x 240 pixels
Colour depth	1 bit
File format	Full screen picture: 320 x 240 1 bit BMP
Front	Painted aluminium
	Approvals
eFlex 500	CE
	Environment
Disposal information	Plastic parts “group 7” (ABS and PC) Front panel aluminium. Electronic parts and lithium battery.
Environmental area	eFlex 500 signs is suited for normal indoor conditions (25 degrees Celsius, humidity < 90RH). Do not place the sFlex 500 sign in direct sunlight.



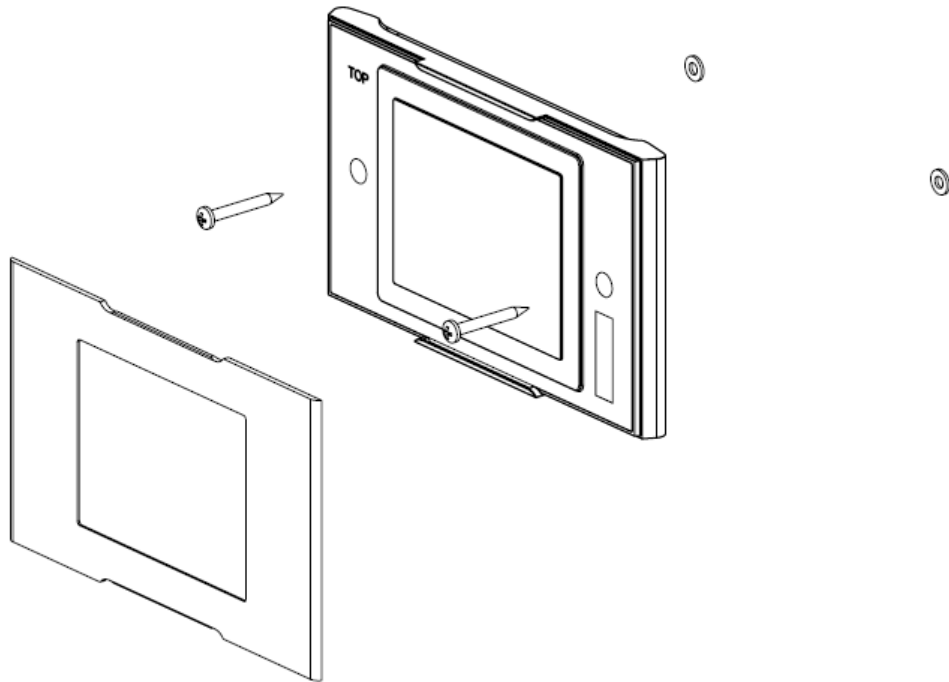
eFlex 500
Weight: 0.165 kg [0,364 lb]
Drawing page 5

Mechanical Specifications

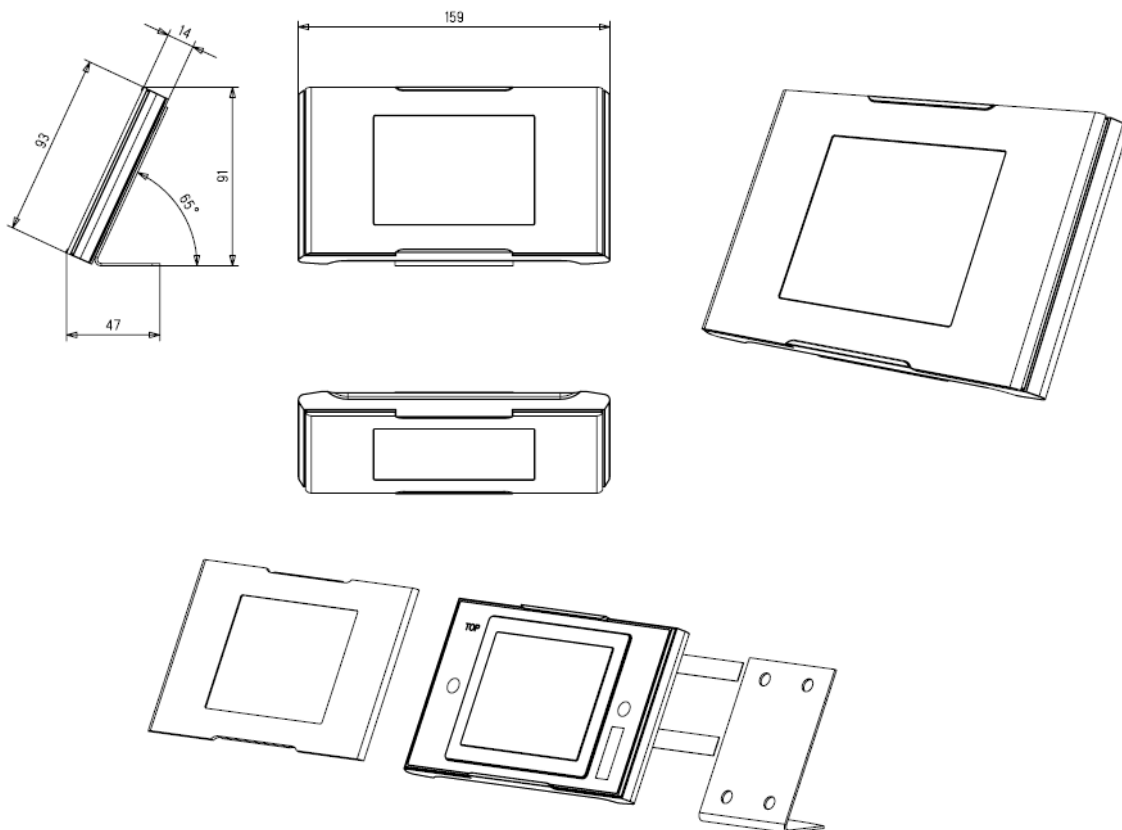


Mechanical Applications

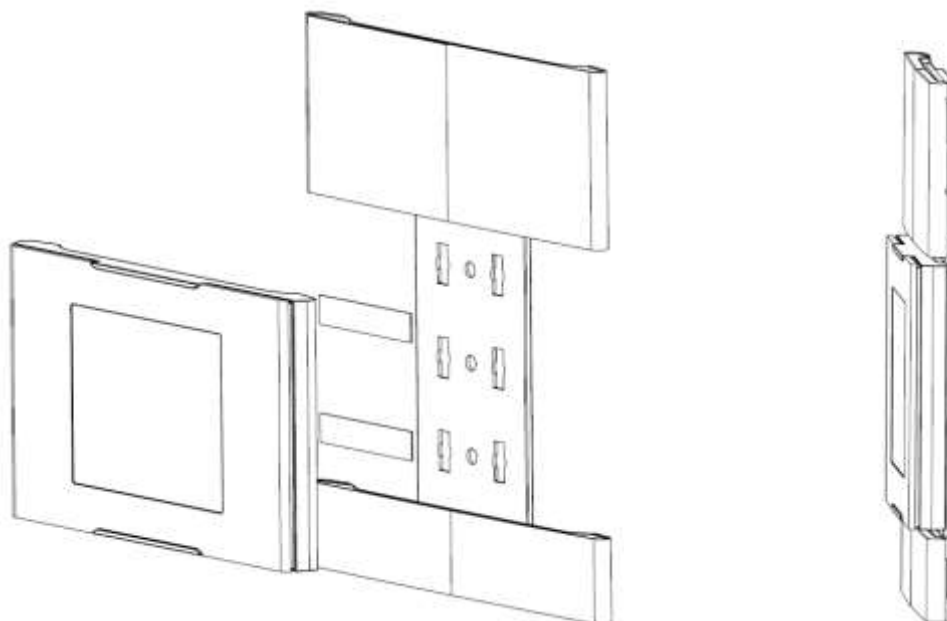
eFlex 500 wall mounted



eFlex 500 on table stand



eFlex integrated in Messenger

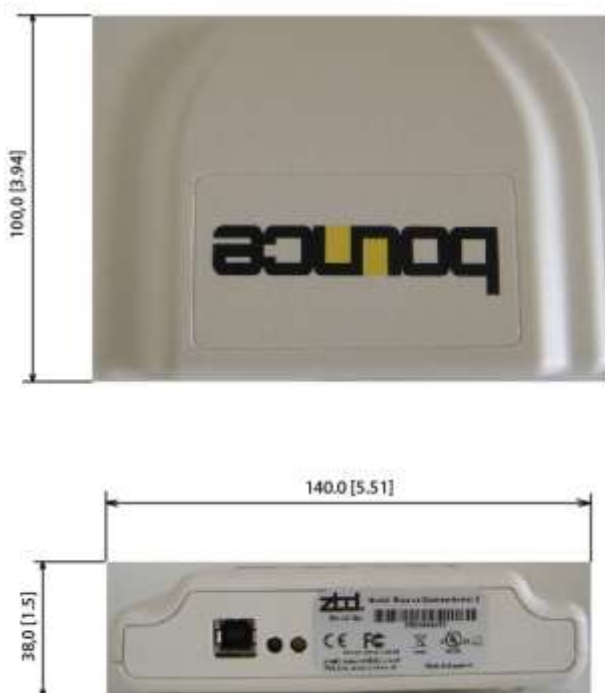


Attention!

Side view

eFlex 500 can only be integrated in Messenger between two standard Messenger panels

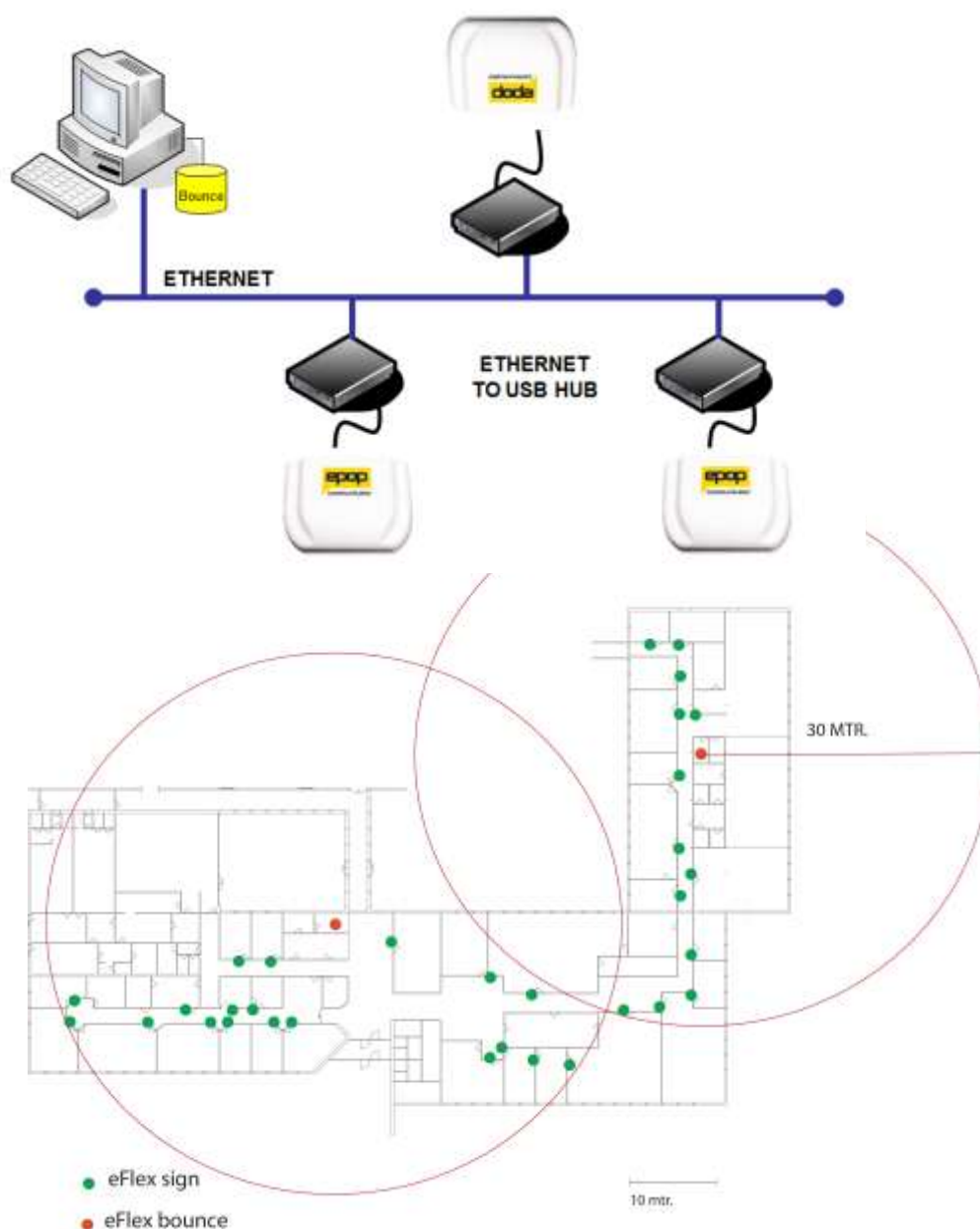
Bounce Mechanical Specifications



Application Guidelines

To specify an application a site visit is required to find out where to place the various signs and how many bounces are needed to communicate with the signs. Information can – as mentioned previously - be transmitted over distances of 30m+. The Bounce is connected directly to a USB port to the PC with the Bounce software installed. To extend the distance from the PC to the bounce a USB hub (Belkin F5L009) can be used. The USB hub makes the USB port available on the LAN (Ethernet) connected to the PC.

Up to 4 USB hubs, to which bounces are connected, can be connected to one PC with the Bounce Software installed. In this way it is possible to cover a much larger area of a building with only one PC.



Front End

The bounce software that is supplied together with an eFlex application is a backend/CMS system converting data to images being displayed on the signs. This software does not contain any kind of user-application for normal updating of signs.

The bounce software is as standard able to collect data from this xml format, but can also be updated directly from a Excel spread sheet.

The specification document can be downloaded from this link:

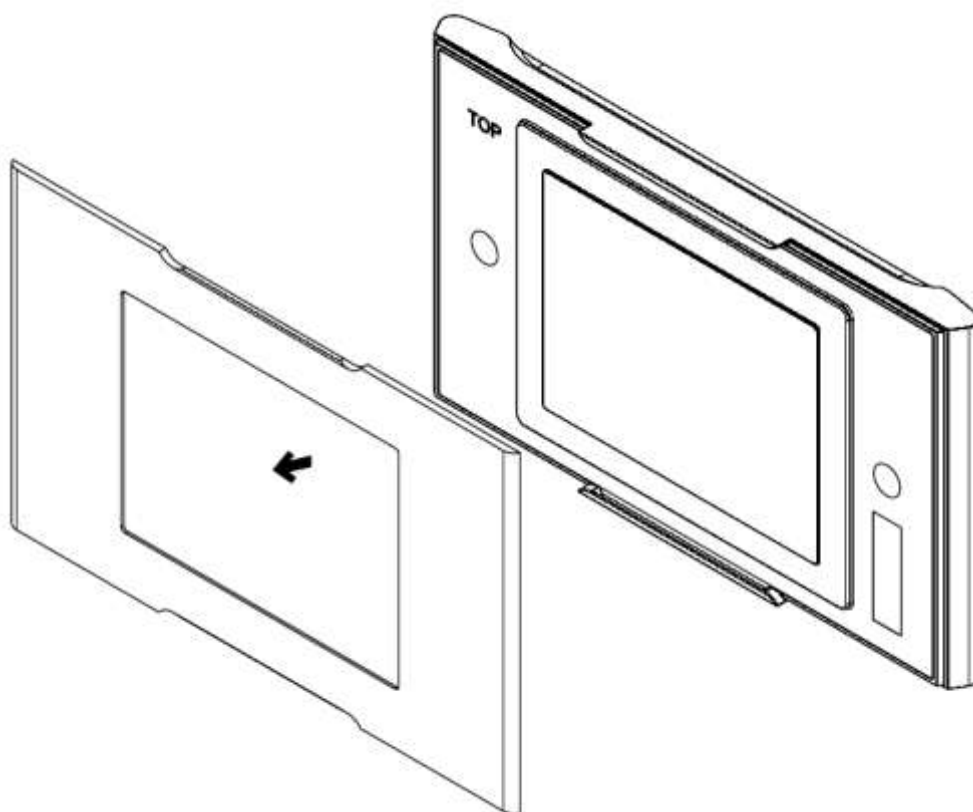
<http://www.add-on.com/support/index.php? m=downloads& a=viewdownload&downloaditemid=42&nav=0,1>

Interface to other media is possible, but requires additional integration works. In many cases it will be the supplier of the external media who will have to develop a module that is able to pull out information and deliver these data to the bounce software in xml format. In other cases please contact the support or sales organisation for further information

Service and Maintenance

Dismounting:

Front panels are removed by pulling them perpendicular to the panel surface.



Cleaning:

Painted surfaces: Use a soft cloth moistened with a mild window detergent.

Do not use Ketone type materials (eg. Acetone), Ethyl alcohol, Toluene, Ethyl acid or Methyl chloride. It might cause permanent damage to the sign due to chemical reaction.