



# IntesisBox<sup>®</sup>

## USB-ENO-ASCII / C

v.1.0.1

**For Supervision and Control of any IntesisBox<sup>®</sup> Enocan Gateways for Air Conditioners from USB enabled Controllers or PC software using simple text messages.**

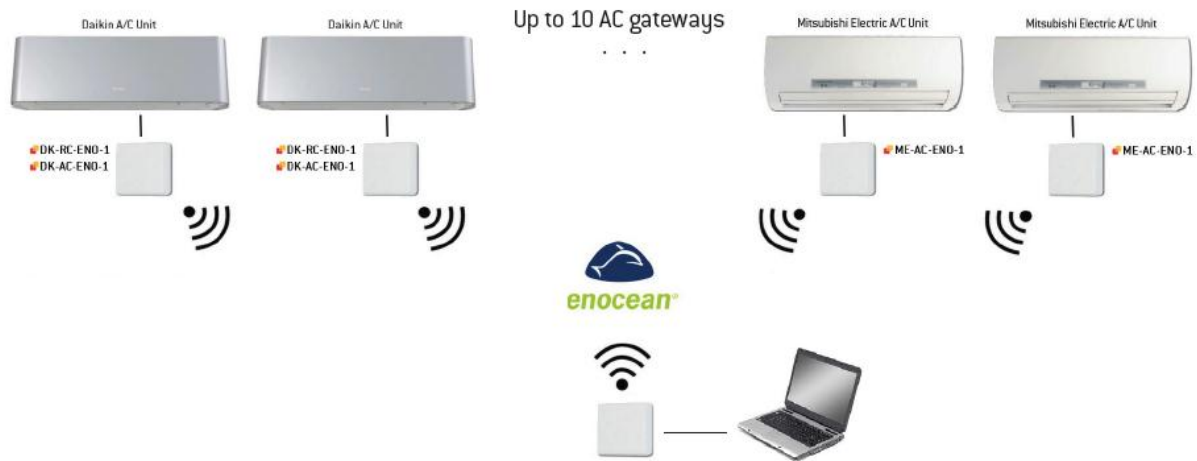
IntesisBox<sup>®</sup> USB-ENO-ASCII / C gateways allow supervision and bidirectional control of any IntesisBox<sup>®</sup> Enocan AC gateway from PC systems such as SCADA's or others using simple text messages.

### 1. Main Features:

- Bidirectional: Supervision and Control.
- Up to 10 AC IntesisBox<sup>®</sup> gateways.
- Control of the AC indoor units using simple text messages.
- Spontaneous messages avoid continuous polling
- Fast and easy commissioning.
- USB Powered. No external power supply needed.
- Plug and Play (virtual COM port).
- Suitable look for home applications.
- Small dimensions.

## 2. Typical application

In Figure 2.1 it is shown a typical integration example using the USB-ENO-ASCII / C to control and supervise up to 10 IntesisBox<sup>®</sup> EnOcean AC Interfaces.



**Figure 2.1** Integration example

### 3. EnOcean Interface

EnOcean Interface	
<b>References</b>	<i>USB-ENO-ASCII: Transceiver @ 868 MHz</i> <i>USB-ENO-ASCII-C: Transceiver @ 315 MHz</i>
<b>Devices supported</b>	Up to 10 IntesisBox <sup>®</sup> AC gateways

**Table 3.1** General features

Coverage distance	Conditions
< 30 m	Under ideal conditions: Broad room, no obstacles and good antenna position.
< 20 m	The room is filled with furniture and people And penetration through up to 5 dry walls or up to 2 brick walls or up to 2 aero concrete walls
< 10 m	Identical to the previous case but the receiver is placed to a room corner or range along a narrow floor.
< 1 m	Metal-reinforced ceilings at upright penetration angle (in strong dependence of reinforcement density and antenna positions).

**Table 3.2** Device coverage distance

## 4. ASCII serial (USB) Interface

- The USB bus is used to power up the gateway so no external power supply is needed.
- Plug and Play. When the gateway is connected to the computer's USB port, a virtual COM port is generated and the gateway can be used right away without any configuration.
- The IntesisBox<sup>®</sup> can be configured to notify any change in the AC indoor unit variables to the control system, sending spontaneous messages. This working mode avoids the control system to perform continuous polling.
- Serial port communication settings:

<b>Baud rate</b>	9600 bps
<b>Stop bit</b>	1
<b>Data bits</b>	8
<b>Flow control</b>	none
<b>Parity</b>	No parity

**Table 4.1** Serial port communication settings

- Communication using simple ASCII text messages listed in the user manual. The AC variables can be easily read/written with these simple messages.

## 5. Compatible IntesisBox<sup>®</sup> AC gateways

In Table 5.1 the compatible IntesisBox<sup>®</sup> AC gateways are listed.

USB-ENO-ASCII	USB-ENO-ASCII-C
ME-AC-ENO-1	ME-AC-ENO-1-C
DK-AC-ENO-1	DK-AC-ENO-1-C
DK-RC-ENO-1	DK-RC-ENO-1-C

**Table 5.1** Device compatibility

## 6. Technical specifications

<b>Envelope</b>	ABS (UL 94 HB). 2,5 mm thickness
<b>Dimensions</b>	71 x 71 x 27 mm
<b>Weight</b>	60g
<b>Color</b>	White
<b>Power supply</b>	USB powered
<b>ASCII port</b>	1 x USB
<b>Mounting options</b>	Desktop Wall
<b>LED indicators (internal)</b>	1 x USB connection error 1 x NOT (Notification) LED 1 x CONF (configuration) LED
<b>Configuration</b>	Through ASCII commands
<b>Operating Temperature</b>	From -25°C to 85°C
<b>Operating humidity</b>	<93% HR, no condensation
<b>Stock humidity</b>	<93% HR, no condensation
<b>RoHS conformity</b>	Compliant with RoHS directive (2002/95/CE).
<b>Certifications</b>	USB-ENO-ASCII: <ul style="list-style-type: none"> <li>• CE</li> </ul> USB-ENO-ASCII-C: <ul style="list-style-type: none"> <li>• FCC (ID: SZV-STM300C)</li> <li>• IC (ID: 5713A-STM300C)</li> </ul>