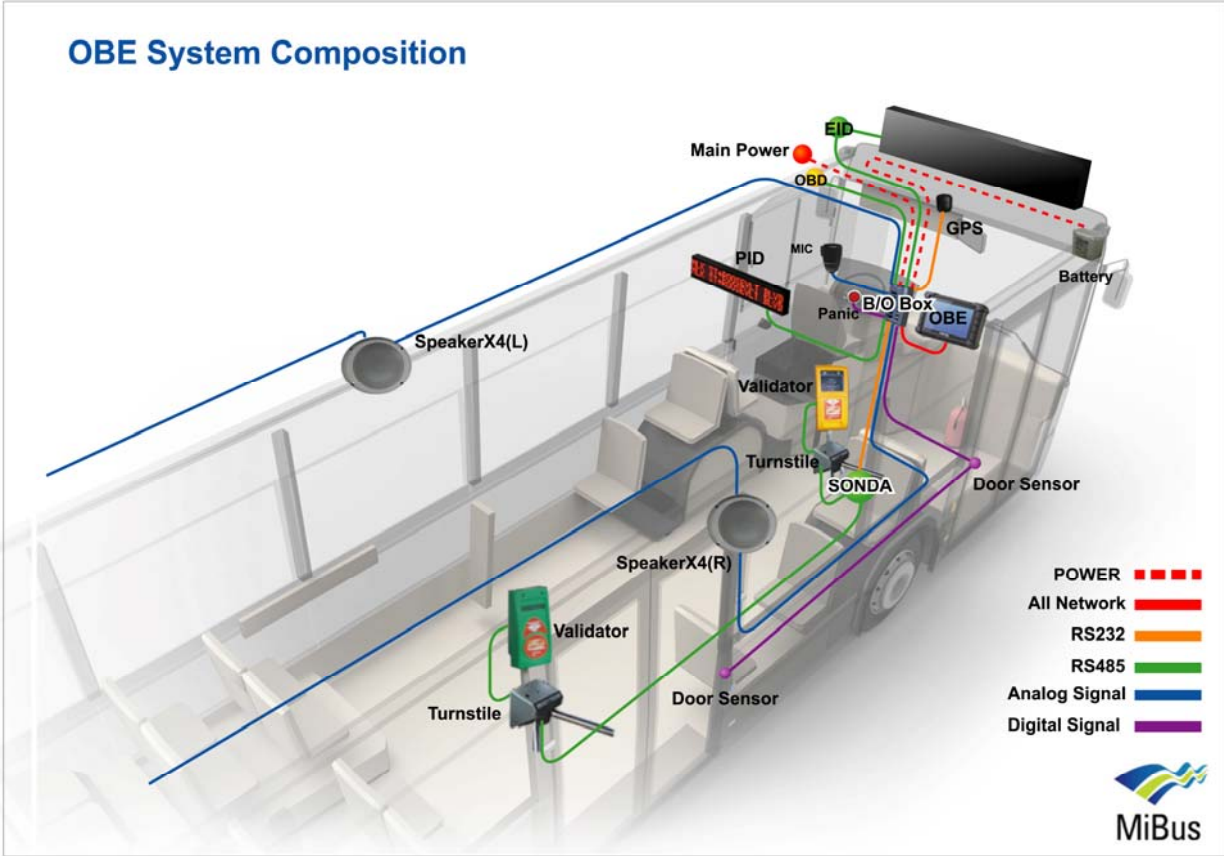


MiBUS OBE (SMT-500P) USER MANUAL

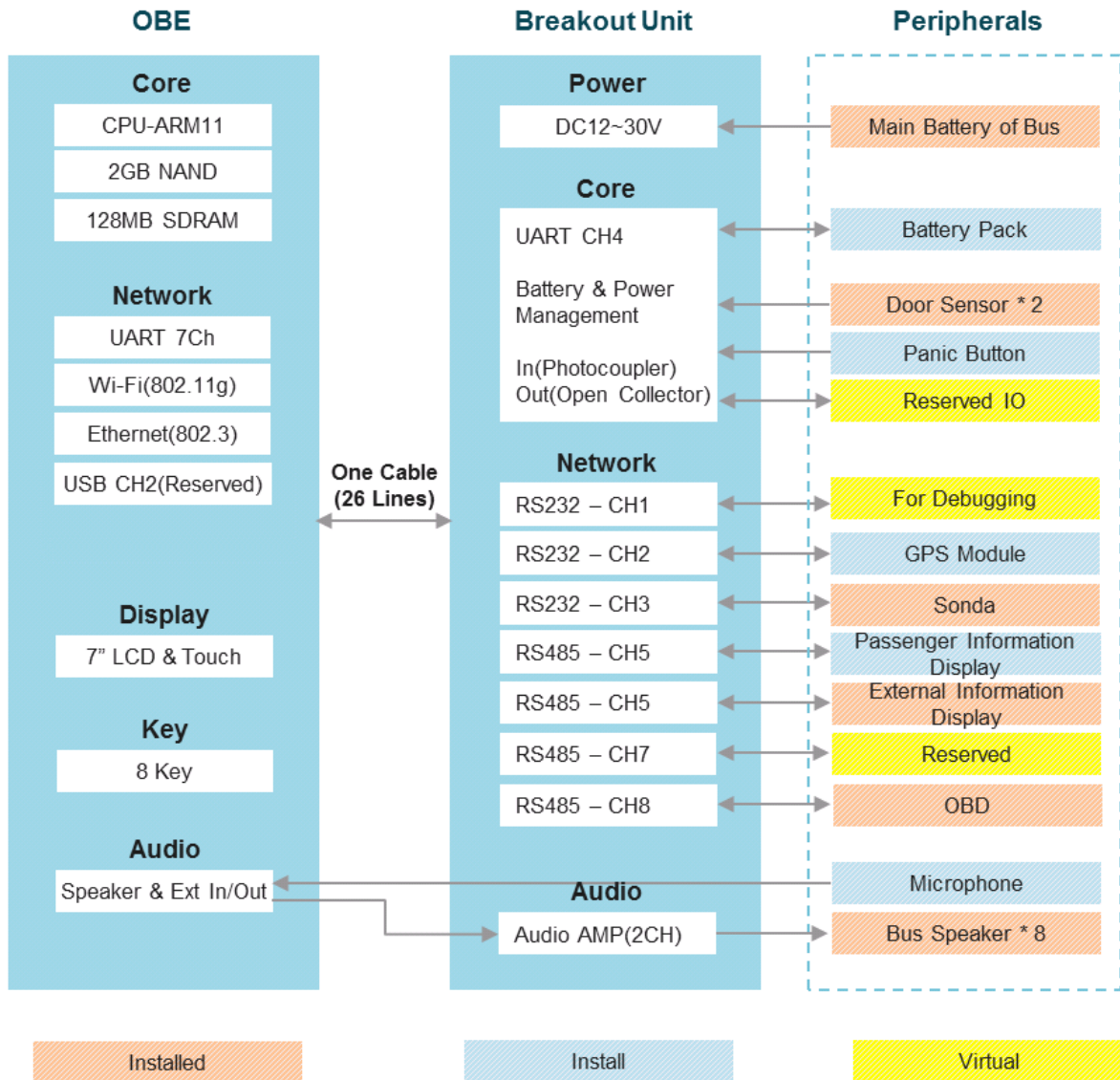


User should uses in a distance over 20 cm

1. MiBUS OBE (BUS Management System Composition)



2.MiBUS OBE System Block Diagram



3.MiBUS OBE

A. OBE

OBE as the core device of the OBE system with 7-inch LCD with all of the information collected and processed is a device that performs. OBE coordinates of the GPS Module is based on the current location and status information of the bus created, and also through various car devices and interfaces, the state of the car (fuel state, RPM, etc.) and information (Turnstile, speed, cumulative distance, etc.) collect. In addition, the control center for voice communication and Microphone, in the car to send to the emergency control center, performs for the Panic Button and interface.

Information for passengers in the passenger terminal (PID) and external information terminal (EID) provides information on the text, the driver of the vehicle through a LCD monitor current service status (planned contrast variation, the current stops, etc.) and provides various alarms and messages should.

B. OBE Shape



C. Specification

Items		Contents
CPU		<ul style="list-style-type: none"> ◆ SAMSUNG S3C6410 ARM11/MAX 667MHz
Memory		<ul style="list-style-type: none"> ◆ NAND Flash : 2GByte ◆ SDRAM : 128MByte
OS		<ul style="list-style-type: none"> ◆ Embedded Linux 2.6
Audio		<ul style="list-style-type: none"> ◆ AC 97 Audio CODEC, External 30W Audio AMP(Stereo), Internal Speaker * 2 ◆ External Handy MIC
Display		<ul style="list-style-type: none"> ◆ 7" LCD Touch Screen (4-wire) with outdoor brightness(400nits)
GPS		<ul style="list-style-type: none"> ◆ Accuracy : 5 meters, Availability : 98%, 51 channel
Key		<ul style="list-style-type: none"> ◆ 8 Keys: Left * 4, Right * 4
Network		<ul style="list-style-type: none"> ◆ J1939 * 1 ◆ UART * 7CH ◆ USB * 2CH(MODEM) ◆ 10/100 Ethernet(IEEE802.3) * 1 ◆ Wi-Fi(IEEE802.11b,g)
Environment condition	Temperature	<ul style="list-style-type: none"> ◆ Operating Temperature: -5 ~ 85℃
	Humidity	<ul style="list-style-type: none"> ◆ Operating Humidity: 5% to 95%
Power		<ul style="list-style-type: none"> ◆ Supply voltage range : DC 12 ~ 30V/Max 50W, External Battery 12V/4Ah
Size		<ul style="list-style-type: none"> ◆ 232(W) * 145(H) * 56.5(D) mm

4. GPS Module

1. shape



Specification

Items	Contents
CPU	◆ GPS DSP with integrated real time clock(RTC) ARM7EJ-S CPU
Memory	◆ 4Mbit FLASH memory
Specifications	◆ Built-in regulators (LDO)
	◆ GPS receiver With Patch Antenna
	◆ Patch Antenna Size : 25(W) * 25(H) * 4(D)mm
Size	◆ 48(W) * 57(H) * 15(D) mm

5. Breakout Box

1. Shape



1.1 Specification

Items	Contents
CPU	<ul style="list-style-type: none">♦ ST STM32F103 ARM Cortex-M3 72MHz
Memory	<ul style="list-style-type: none">♦ Internal 256kByte FLASH♦ Internal 64Kbyte RAM
Specifications	<ul style="list-style-type: none">♦ Operating Temperature: -5 ~ 85℃
	<ul style="list-style-type: none">♦ Operating Humidity: 5% to 95%
	<ul style="list-style-type: none">♦ Supply voltage range : DC 12-30V/MAX 50W,♦ External Battery 12V
Size	<ul style="list-style-type: none">♦ 155(W) * 80(H) * 40(D) mm

6.Warning

FCC RF INTERFERENCE STATEMENT

NOTE :

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio, TV technical for help.
- Only shielded interface cable should be used.

Finally, any changes or modifications to the equipment by the user not expressly approved by the grantee or manufacturer could void the users authority to operate such equipment

The user's manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. In cases where the manual is provided only in a form other than paper, such as on a computer disk or over the Internet, the information required by this section may be included in the manual in that alternative form, provided the user can reasonably be expected to have the capability to access information in that form.

For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.