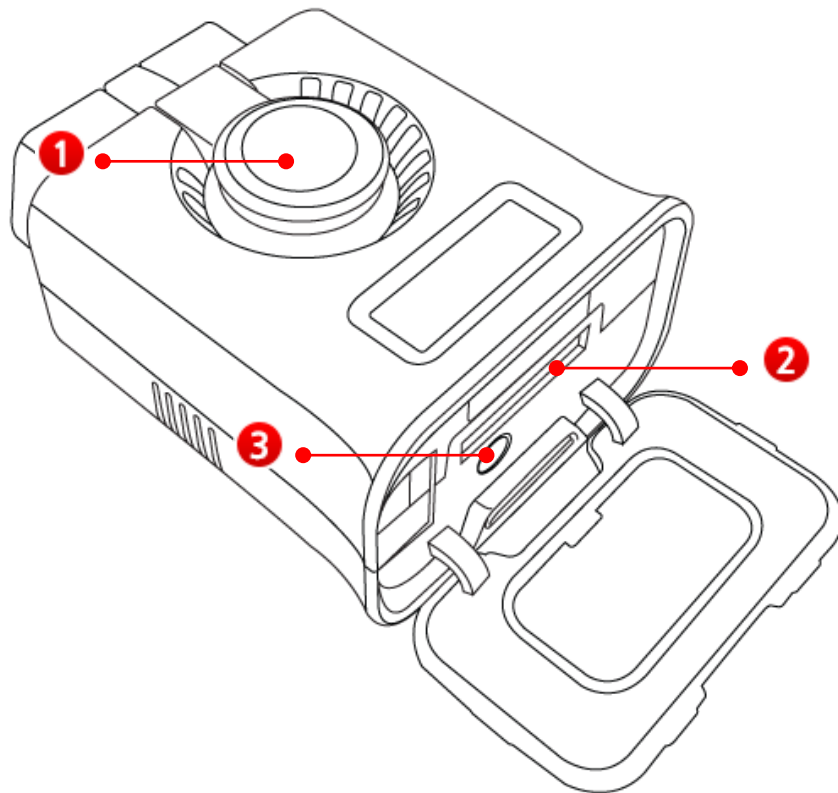


Hardware Specification

VCI II Module



| | | |
|-----------------|--------------------------------------|--|
| <p>1</p> | <p>Module locking disable button</p> | <p>Button to disable locking state when removing VCI II Module from OBD-II Connector</p> |
| <p>2</p> | <p>30-pin connector</p> | <p>Connector to be used for wire connection between VCI II Module and tablet (exclusive cable is required)</p> |
| <p>3</p> | <p>Bluetooth pairing switch</p> | <p>Button to be used for bluetooth pairing between VCI II Module and Trigger Module</p> |

General Specification

| Item | | Specification |
|---------------------|-----------|---|
| CPU | | ARM 32-bit Cortex™-M3 / 120 MHz |
| Memory | | Flash Memory 1 MByte SRAM 128 KByte |
| Operating Voltage | | 7~35V / DC |
| Temperature | Operating | -10°C - 50 °C (14 °F - 122 °F): wireless mode -10°C - 55 °C (14 °F - 131 °F): USB mode |
| | Storage | -20 °C - 80 °C (-4 °F - 176 °F) |
| Relative Humidity | Operating | Non-condensate @ 0 °C - 10 °C (32 °F - 50 °F) |
| | | 95% RH @ 10 °C - 30 °C (50 °F - 86 °F) |
| | | 70% RH @ 30 °C - 55 °C (86 °F - 131 °F) |
| | Storage | Non-condensate @ -20 °C - 80 °C (-4 °F - 176 °F) |
| Current Consumption | | Approximately 300 mA @ 12 V for general condition |
| Case | | PC + ABS |
| Product Size | | 58 X 74 X 36 mm |
| Weight | | 90 g |

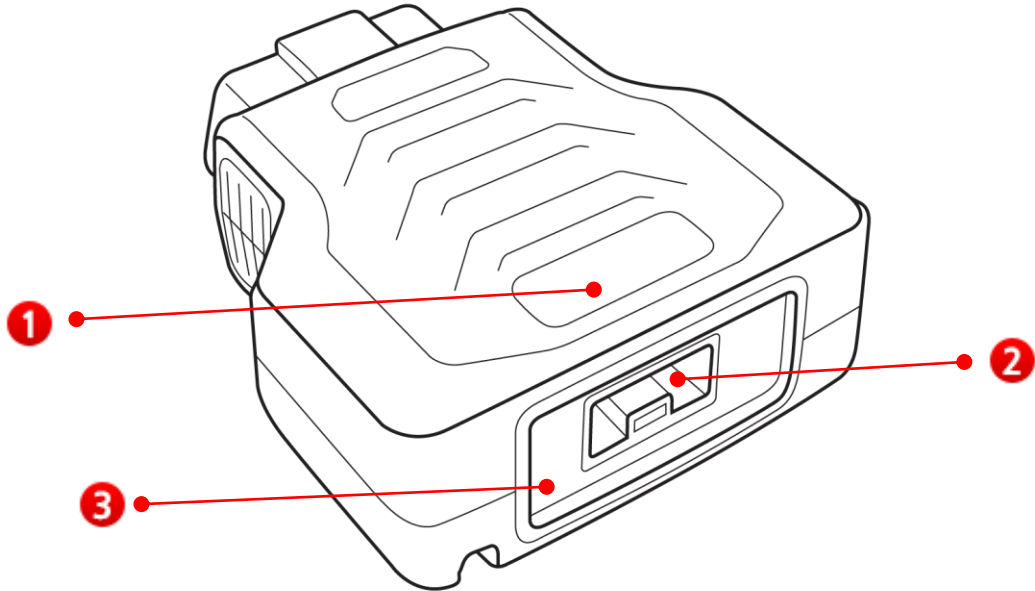
Interface

| Item | Specification |
|-----------------|---|
| Wire | USB 2.0 Full Speed (use 30-pin connector of VCI II module) |
| Wireless | Wireless LAN IEEE 802.11 a/b/g/n (2.4 GHz / 5 GHz) Bluetooth 2.1 + EDR |
| Indicator | 2 LEDs (front surface/bottom surface) |
| Button (switch) | Bluetooth pairing button (used when connecting to Trigger Module) |

Vehicle Communication Protocol

| Item | Specification |
|--------------------------------|---|
| Vehicle communication protocol | CAN (High Speed, Low Speed) KWP-2000 (4 channels) Flexray |

VCI III 모듈

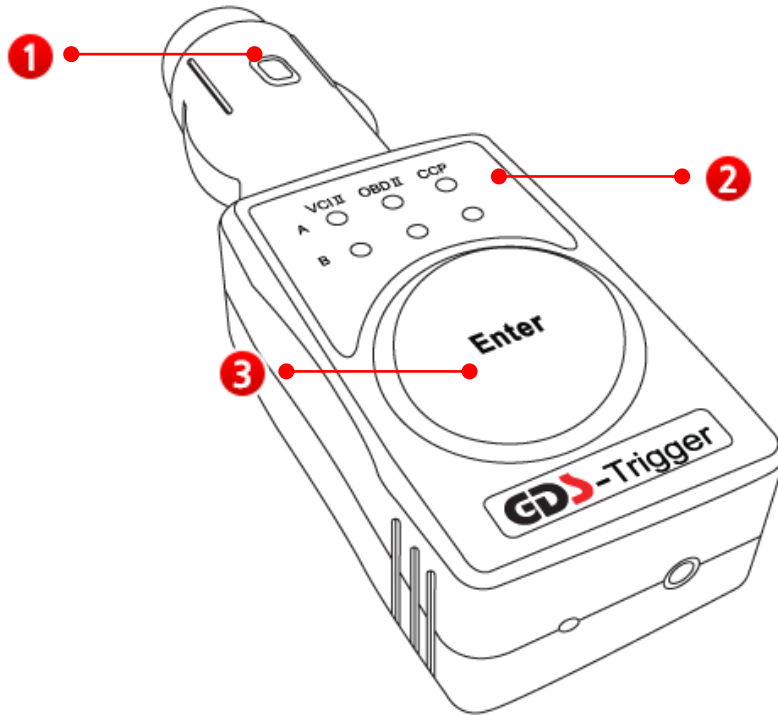


| | | |
|----------|----------------------------------|--|
| 1 | LED status information | Diagnosis and reprogram communication status notification display |
| 2 | USB connector (I/O connector) | Communication connector terminal used for wired communication between the VCI III body and the information terminal (tablet) |
| 3 | Bluetooth pairing switch | Button to be used for bluetooth pairing between VCI III Module and Trigger Module |

Specification

| Item | | Specifications |
|----------------------------|----------------------------|--|
| Processor | MCU | ARM 32-bit Cortex™-M7 Core/480MHz |
| | RAM (Internal Memory) | 1MByte |
| | Flash (Internal Memory) | 2MByte |
| e-MMC (External Memory) | | 8GByte |
| O/S | | RT O/S |
| Operating Voltage | | 9V ~ 30VDC |
| Temperature | Operating | -20°C ~ 60°C |
| | Storage | -30°C ~ 80°C |
| Indicators | LED | 3 colors LED(Red/Green/Blue) * 4EA |
| | Buzzer | 2.7KHz/88dBA |
| Wireless Protocol | Wi-Fi | Wireless LAN IEEE 802.11 a/b/g/n (2.4GHz / 5GHz) |
| | Bluetooth | Bluetooth5.0 |
| Wire Protocol | USB | USB 2.0 x 1EA(PC & Tablet) |
| Vehicle Protocol | | CAN(High Speed CAN & CAN-FD, Low Speed CAN) |
| | | K&L Line, Reprogram |
| | | Ethernet |

Trigger Module



| | | |
|---|-------------------------|--|
| 1 | Cigar lighter connector | To supply power for using Trigger Module, Trigger Module should be connected to cigar lighter socket of the vehicle. |
| 2 | Status indicating LED | Indicates pairing status of Trigger Module and VCI II Module, and saving status of driving data. |
| 3 | Enter button | Button to manually configure trigger time point when using the driving data saving function (also used for bluetooth pairing with VCI II Module) |

General Specification

| Item | Specification |
|------|---------------|
|------|---------------|

| | | |
|----------------------------|------------------|---|
| Microcontroller | | ARM 32-bit Cortex™-M3 / 120 MHz |
| Memory | | Flash Memory 1 MByte SRAM 128 Kbyte |
| Operating Voltage | | 7 – 35 V / DC |
| Temperature | Operating | -10 °C – 50 °C (14 °F – 122 °F): Bluetooth mode |
| | Storage | -20 °C – 80 °C (-4 °F – 176 °F) |
| Relative Humidity | Operating | Non-condensate @ 0 °C – 10 °C (32 °F – 50 °F) |
| | | 95% RH @ 10 °C – 30 °C (50 °F – 86 °F) |
| | | 70% RH @ 30 °C – 50 °C (86 °F – 122 °F) |
| | Storage | Non-condensate @ -20 °C – 80 °C (-4 °F – 176 °F) |
| Current Consumption | | Approximately 70 mA @12 V in general condition |
| Case | | PC + ABS |
| Product Size | | 39 X 112 X 26 mm |
| Weight | | 55 g |

Interface

| Item | Specification |
|--------------------------|---|
| Wireless protocol | Bluetooth 2.1 + EDR |
| Indicator | 6 LEDs + Backlight LED of Enter button |
| Button | Enter button |

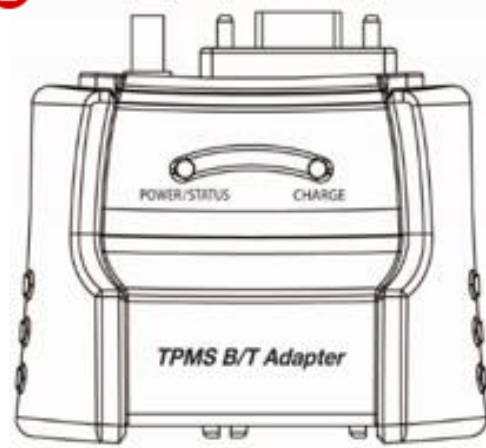
TPMS Module

1



TPMS Module

2



B/T Adapter

1 General Specification (TPMS module)

| Item | | Specification |
|----------------------------------|-----------|--|
| Microcontroller | | 8 Bit MCU (MB95F136) @4 MHz |
| Operating Voltage | | 7 - 35 V / DC |
| Communication Port Specification | | RS 232, 9600 bps |
| TPMS LF/RF | | LF: 125 kHz RF: 315 MHz or 433 MHz |
| TPMS Protocol | | SIEMENS (FSK), LEAR, TRW, etc. |
| Charging Battery | | Li-Ion Polymer 2100 mAh 1 cell |
| Temperature | Operating | 0 °C - 45 °C (32 °F - 113 °F) : when charging -10 °C - 50 °C (14 °F - 122 °F) : when discharging |
| | Storage | -10 °C - 70 °C (14 °F - 158 °F) |
| Relative Humidity | Operating | Non-condensate @ 0 °C - 10 °C (32 °F - 50 °F) 90% RH @ 10 °C - 30 °C (50 °F - 86 °F) 70% RH @ 30 °C - 50 °C (86 °F - 122 °F) |
| | | Storage |
| External Indicating Light | POWER | Red |
| | CHARGE | Red, green |
| | LF/RF LED | Red, green |
| Button | | Power ON/OFF Key, Enter Key |
| Module Size | | 127 X 86 X 36 mm |
| Weight | | 255 g |
| Case | | PC+ABS |
| Shroud | | TPE |

2 General Specification (TPMS B/T adaptor)

| Item | | Specification |
|---------------------|---|---|
| Microcontroller | | ARM 32-bit Cortex 120 MHz |
| Memory | | Flash Memory 1 MByte SRAM 128 KByte |
| Operating Voltage | | 7 – 35 V/DC |
| Temperature | Operating | 0 °C – 45 °C (32 °F – 113 °F): when charging -10 °C – 50 °C (14 °F – 122 °F): when discharging |
| | Storage | -10 °C – 70 °C (14 °F – 158 °F) |
| Relative Humidity | Operating | Non-condensate @ 0 °C – 10 °C (32 °F – 50 °F) |
| | | 95% RH @ 10 °C – 30 °C (50 °F – 86 °F) |
| | 70% RH @ 30 °C – 50 °C (86 °F – 122 °F) | |
| Storage | | Non-condensate @ -10 °C – 70 °C (14 °F – 158 °F) |
| Current Consumption | | Approximately 180 mA @12V in general condition |
| Charging Battery | | Li-Ion Polymer 1000 mAh 1 cell |
| Case | | PC + ABS & TPE Rubber Shroud |
| Size | | 81 X 75 X 45 mm |
| Weight | | 145g |

Interface

| Item | Specification |
|---------------------------|-------------------------------|
| Wire | RS232 UART |
| Wireless | Bluetooth 2.1 + EDR |
| External Indicating Light | 2 LEDs (POWER/STATUS, CHARGE) |

VCI Module



General Specification

| Item | | Specification |
|-------------------|-----------|---|
| Microcontroller | | ARM9 (S3C2410A) @ 208 MHz |
| Memory | | RAM 32 MByte ROM 32 Mbyte |
| Operating Voltage | | 7 – 35 V/DC |
| Temperature | Operating | -10 °C – 70 °C (14 °F – 158 °F): USB mode |
| | Storage | -20 °C – 80 °C (-4 °F – 176 °F) |
| Relative Humidity | Operating | Non-condensate @ 0 °C – 10 °C (32 °F – 50 °F) |
| | | 95% RH @ 10 °C – 30 °C (50 °F – 86 °F) |
| | | 70% RH @ 30 °C – 50 °C (86 °F – 122 °F) |
| | Storage | 40% RH @ 50 °C – 70 °C (122 °F – 158 °F) |
| Operating Mode | | Diagnosis communication (normal)/Driving data record (record) |

| | |
|---------------------|---|
| Current Consumption | Approximately 350 mA @12 V in general condition |
| Case | ABS & Rubber Shroud |
| Size | 170 × 105 × 33 mm |
| Weight | 350 g |

Interface

| Item | Specification |
|----------------|---------------------|
| Wire | USB 1.1 |
| VSS | Velocity simulation |
| Voltage Output | 5 - 20 V/DC |

Vehicle Communication Protocol

| Item | Specification |
|----------------------------------|--------------------------------|
| CAN | CAN 2.0B |
| K-line/L-line | ISO-9141, ISO-9141-2, KWP-2000 |
| Commercial Vehicle Type Response | SAE-J1708, RS-232C |
| Data/control line | Melco Pull-Down UART |

Module Certification Information

VCI II

| | |
|----------------------------|--|
| Model Name | VCI II |
| Equipment Name | Specific low power wireless device (wireless device for wireless data communication system) |
| Manufacturer | GIT Co., Ltd. |
| Name of Certified Business | GIT Co., Ltd. |
| Country of Manufacturing | Republic of Korea |
| Manufactured Date | To be indicated separately |
| Certification No. | MSIP-CMM-TMG-VCI-II |

As the wireless device has a possibility of electric wave interference during its operation, it cannot provide services related to personal safety.

This device is an electromagnetic compatible device for domestic use (level B) with the purpose of using it primarily at homes, and it can also be used in all other areas.

Trigger Module

| | |
|----------------------------|---|
| Model Name | Trigger Module |
| Equipment Name | Specific low power wireless device (wireless device for wireless data communication system) |
| Manufacturer | GIT Co., Ltd. |
| Name of Certified Business | GIT Co., Ltd. |
| Country of Manufacturing | Republic of Korea |
| Manufactured Date | To be indicated separately |
| Certification No. | MSIP-CRM-TMG-TRIGGER |

As the wireless device has a possibility of electric wave interference during its operation, it cannot provide services related to personal safety.

This device is an electromagnetic compatible device for domestic use (level B) with the purpose of using it primarily at homes, and it can also be used in all other areas.

TPMS B/T Adaptor

| | |
|----------------------------|---|
| Model Name | TPMS B/T Adaptor |
| Equipment Name | Specific low power wireless device (wireless device for wireless data communication system) |
| Manufacturer | GIT Co., Ltd. |
| Name of Certified Business | GIT Co., Ltd. |
| Country of Manufacturing | Republic of Korea |
| Manufactured Date | To be indicated separately |
| Certification No. | MSIP-CMM-TMG-TPMSBTA |

As the wireless device has a possibility of electric wave interference during its operation, it cannot provide services related to personal safety.

This device is an electromagnetic compatible device for domestic use (level B) with the purpose of using it primarily at homes, and it can also be used in all other areas.