



fitlet

fitlet-H/T Owner's Manual



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For more information and to obtain the latest revision of this document, please visit

[www.fit-pc.com](http://www.fit-pc.com)

# Introduction

## Package contents

1. fitlet-H/T computer
2. Power supply: input 100-240VAC 50/60Hz, 36W (or 60W) output 12VDC 3A (or 5A), DC plug lock
3. Attachable Standard North-American and EU plugs AC cord. \*
4. HDMI to DVI adapter
5. Audio 3.5mm to RCA cable
6. 2 WiFi antennas (in some models)
7. Mini-serial to DB9-female adapter cable

## To use fitlet-H/T, you will need:

- A display with DVI/HDMI input + DVI/HDMI cable
- USB keyboard and mouse

\* Local resellers may supply fitlet-H/T with other AC cord types.

## Hardware specifications

Processor	Fitlet-H	Fitlet-T
Type	AMD A10 Micro-6700T SoC	AMD GX-424CC SoC
Cores	64-bit quad core	64-bit quad core
Clock speed	1.2-2.2GHz	2.4GHz
TDP	4.5W	25W
<b>Memory</b>		
Supported	2x SO-DIMM 204-pin DDR3L SDRAM Up to 16GB (2x 8GB) DDR3L-1333	2x SO-DIMM 204-pin DDR3L SDRAM Up to 16GB (2x 8GB) DDR3L-1866
<b>Storage</b>		
Supported	1x SATA up to 6 Gbps (SATA 3.0) for internal 2.5" HDD/SSD 1x mSATA slot up to 6 Gbps (SATA 3.0)	
<b>Graphics</b>	<b>Fitlet-H</b>	<b>Fitlet-T</b>
GPU	AMD Radeon R6 Graphics Dual display mode supported	AMD Radeon R5E Graphics Dual display mode supported
Display Interface 1	HDMI 1.4a up to 1920 x 1200 @ 60Hz	
Display Interface 2	HDMI 1.4a up to 1920 x 1200 @ 60Hz	
<b>Audio</b>		
Codec	Realtek ALC886 HD audio codec	
Audio Output	Analog stereo output Digital 7.1+2 channels S/PDIF output 3.5mm jack	
Audio Input	Analog stereo Microphone input Digital S/PDIF input 3.5mm jack	

<b>Networking</b>		
LAN	2x GbE LAN ports LAN1: Intel I211 GbE controller (RJ-45) LAN2: Intel I211 GbE controller (RJ-45)	
Wireless	Intel 2.4/5GHz dual band 7260HMW WLAN 802.11ac Bluetooth 4.0	
<b>Connectivity</b>		
USB	2x USB 3.0 6x USB 2.0	
Serial	1x Serial communication port COM1: RS232 via mini serial connector	
SD	Micro-SD slot support SD/SDHC/SDXC cards Transfer rates up to 25 MB/s	
Special I/O	1x micro SIM slot (6 pins) <sup>4</sup>	
Expansion	Half/Full-size mini-PCIe socket Half/Full-size mini-PCIe/mSATA socket <sup>2</sup>	
<b>Advanced Technologies</b>		
CPU Virtualization	Yes	
Special Functionality	Auto-On Wake-on-LAN Wake-on-Timer PXE Boot Watchdog	
<b>Operating System</b>		
Supported	Windows 7/8/10, 32-bit and 64-bit Linux 32-bit and 64-bit Embedded OS	
<b>Operating Conditions</b>		
Input Voltage	<b>Fitlet-H</b>	<b>Fitlet-T</b>
Power Consumption	Unregulated 10 – 15VDC input <sup>1</sup>	5W – 25W
Operating Temperature	1. Commercial HDD models: 0°C – 50°C SSD models: 0°C – 70°C 2. Extended (TE) SSD models only: -20°C – 70°C 3. Industrial (TI) SSD models only: -40°C – 70°C	
Relative Humidity	10% to 90% (operation) 5% to 95% (storage)	
MTTF	> 100,000 hours	
<b>Enclosure</b>		
Material	<b>Fitlet-H</b>	<b>Fitlet-T</b>
Cooling	Die Cast Aluminum	
Dimensions	Passive Cooling Fanless Design	
Weight	19cm x 16cm x 2.5cm	19cm x 16cm x 4cm
	1067gr	1100gr
<b>Package</b>		
Warranty	5 years <sup>3</sup>	
Notes	1. Nominal input voltage: 12V 2. Shared with mSATA 3. For products purchased since 1-Jan-2013 4. For use with mini PCIe Cellular Modem module	

# fitlet-H/T features

## Front panel

The features of the front panel of fitlet-H/T depend on specific FACE Module used and are documented separately.

## Power

fitlet-H/T has a tactile power push-button. It is used for turning on/off the PC and for standby/resume when supported by the operating system.

A push of at least 5 seconds will always turn off the fitlet-H/T.

## Display

fitlet-H/T has dual display interface with support for dual head: 2x HDMI with audio support.

To connect fitlet-H/T to a DVI display, use the provided HDMI to DVI-D adapter. Use a DVI cable to connect the adapter to the display.

## Audio

There are 2 standard 3.5mm jacks on the back panel.

Right:

- Stereo line-in using a standard 3.5mm plug
- S/PDIF 7.1 in using provided cable

Left:

- Stereo line-out using a standard 3.5mm plug
- S/PDIF 7.1 out using provided cable

## LAN

fitlet-H/T features two 10/100/1000BaseT Ethernet ports using standard RJ45 connectors. Use a standard Ethernet cables to connect.

The connectors feature built-in LEDs that are lit when a connection is detected.

## WLAN

2 WLAN antennas are supplied in models with integrated WiFi and should be screwed into the standard SMA connectors.

## USB

There are 2 USB 3.0 ports (5 Gbps) and 2 USB 2.0 ports on the back panel. FM4U module contains 4 additional USB2.0 ports on the front panel. All USB ports support current up to 1A.

## Serial port

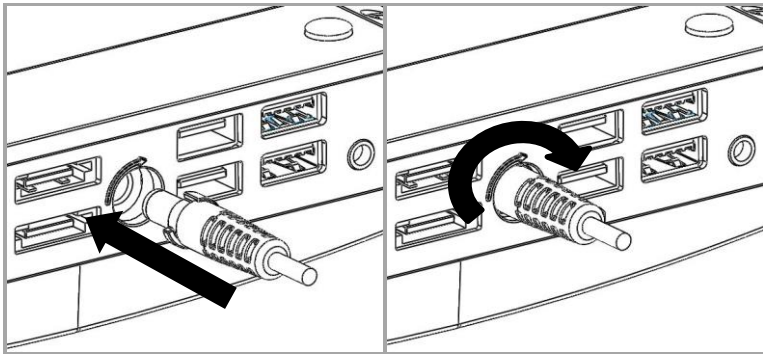
RS232 mini-serial ports is located on the back panel.

Mini-serial to DB9 cable to connect to standard serial devices is supplied in the package.

# Quick start guide

## Connecting fitlet-H/T

- Turn off the display and connect it to the fitlet-H/T HDMI connector (use the HDMI to DVI adapter if needed).
- Connect the USB keyboard and mouse to USB 2 connectors.
- Plug the Ethernet cable into the Ethernet connector.
- In fitlet-H/T models with WiFi: Mount the WiFi Antennas on the SMA connector by turning it clockwise repeatedly until the antenna holds firm.
- Insert the DC plug into the fitlet-H/T DC-in jack. Rotate clockwise 90° to secure.



- Plug the speakers into the line-out jack.
- Connect the power supply to the AC cord and plug the cord into AC outlet. The front panel logo should light up as the fitlet-H/T boots.

## Booting Linux

Linux loads automatically on power up. Upon boot you will be guided through the Linux Mint first-boot setup procedure.

## Booting Windows 7

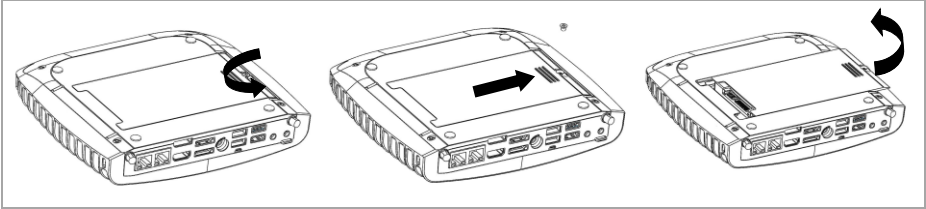
Upon first power-up, you will be guided through the Windows Welcome procedure which is self-explanatory. The Windows 7 serial number is printed on the Windows 7 label on the bottom of your fitlet-H/T.

# Maintenance

fitlet-H/T requires no maintenance. You should not take the fitlet-H/T apart other than opening the service door. Taking fitlet-H/T apart will void its warranty.

The following operations can be conducted by the user:

## Opening service door



1. Unscrew marked Philips screw at the bottom to release service-door.
2. Slide out service-door until it stops – about 10 mm.
3. Service-door is now detached. Lift edge of service-door to completely remove.

Re-assemble in reverse order. Hard disk connects by sliding-in the service-door.

## Service bay



The service-bay provides easy access to hard-disk, RAM, and mini-PCIe sockets incl. WLAN module.

**Hard disk** is 2.5" 7mm/9.5mm SATA. It is screwed to service door by 4 screws, 2 on each side. It is recommended to use 5400 RPM hard disk or SSD. 7200 RPM or higher is not recommended due to higher power consumption and risk of overheating.

**RAM** – use up to DDR3L -1333 SO-DIMM modules (1.35V) SO-DIMM modules.

**Mini-PCIe** – the half-size mini-PCIe is normally used for WLAN. If you remove the WLAN module make sure to isolate the ends of antenna cables with some tape to avoid short-circuit. The full-size mini PCIe is available for any use.

# **BIOS Setup Utility**

## **Entering BIOS Setup Utility**

Turn off the fitlet-H/T.

Turn on while holding down the F2 key.

See [http://www.fit-pc.com/wiki/index.php/Main\\_Page](http://www.fit-pc.com/wiki/index.php/Main_Page).

## **Warranty and RMA**

### **Warranty**

- Compulab guarantees products against defects in workmanship and material for a period of 60 months from the date of shipment.
- Your sole remedy and Compulab's sole liability shall be for Compulab, at its sole discretion, to either repair or replace the defective product at no charge.
- This warranty is void if the product has been altered or damaged by accident, misuse or abuse.

### **RMA**

Keep the original package for shipping in case of hardware failure.

In case of HW failure of a fitlet-H/T under warranty, please contact the seller of that fitlet-H/T.

Please provide the following required information:

- fitlet-H/T serial number
- Name of purchaser
- Address
- Problem description

If the fitlet-H/T was purchased directly from Compulab, please email [rma@fit-pc.com](mailto:rma@fit-pc.com).

## **Tips for saving power**

### **General**

- Working without a connected display automatically disables the graphics controller – saving power.
- Disconnect external USB devices when not in use.

### **In Operating System**

Use power scheme as follows

- Turn off monitor after several minutes not in use
- Turn off hard disk after several minutes not in use
- System standby after an hour not in use





fitlet-H/T

Manufacturer: Compulab Ltd.

This device complies with Part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Statement

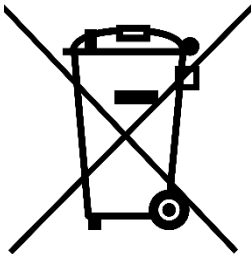
Changes or modifications to this equipment not expressly approved by the party responsible for compliance (Compulab Ltd.) could void the user's authority to operate the equipment.

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 technician for help.

## WEEE



This symbol means that you must dispose of an electrical item separately from general household waste when it reaches the end of its useful life. Take your PC to your local waste collection point or center. This applies to all countries of the European Union, and to other European countries with a separate waste collection system.