

219.00 EUR

incl. 19% VAT, plus shipping

- **2x Gigabit LAN !**
- **12VDC power input !**
- **2x m.2, 1x miniPCle !**
- **5 phase power design !**



- Up to Intel® Coffee Lake-R 9th i9 35W & 8th i7 95W (6 cores) LGA processor
- Intel® H310/Q370 Chipset
- Intel® vPro technology support (Q370)
- 2 x DDR4 SO-DIMM up to 32GB
- 5 phase power design
- Support triple display for HDMI, DisplayPort and LVDS/eDP
- 1 x M.2 M 2280, 1 x M.2 E 2230, 1 x mPCle Full size, 1 x PCIe X16
- 2 x Intel® Gigabit Ethernet
- DC-in 12V (Optional: 12~24V SKU)

### PH14FEI (PH14FEI) Specifications

#### MECHANICAL

#### FORM FACTOR

Mini-ITX: 6.7" x 6.7"  
(170 mm x 170 mm)

#### SYSTEM

#### PROCESSOR

9th & 8th Gen Intel  
Coffee Lake LGA1151  
Socket Processor, Core  
i7/i5/i3 6-core TDP Max.  
95W, Core i9 8-core  
TDP Max 35W

## PH14FEI (PH14FEI) Specifications

CHIPSET	Intel® H310 / Intel® Q370 (Support RAID 0 / 1 & vPro)
SYSTEM MEMORY	DDR4 2666MHz / 2 x 260-pin SO-DIMM / Max. 32GB (Non-ECC)
GRAPHICS	Intel® HD Graphics
ETHERNET	Intel® I219-LM Giga LAN + Intel® I210-AT Giga LAN
I/O CHIPSET	Nuvoton NCT6116D
AUDIO	Realtek® ALC662
TPM	TPM Header
EXPANSION SLOT	*H310 only support M.2 SATA SSD / PCIe 3.0 X16 slot / M.2 2230 E key (PCIe, USB 2.0) / M.2 2242 / 2280 M key (PCIe, SATA) / Mini PCIe Full size (PCIe / USB / SATA)
BIOS	AMI BIOS / 256 Mbit SPI
H/W MONITOR	Temperature Monitor / Voltage Monitor / Fan Monitor
WATCHDOG TIMER	1~255 steps by software program
SMART FAN CONTROL	CPU Fan / System Fan
GRAPHICS	
2nd DISPLAYPORT	Up to 4K (4096 x 2304) @60 Hz
VGA	-
DVI	-
HDMI	Up to 4K (4096 x 2160) @30 Hz
DISPLAYPORT	Up to 4K (4096 x 2304) @60 Hz
LVDS	Up to 1920 x 1200 @60 Hz
eDP (Option)	Up to 4K (4096 x 2304) @60 Hz
REAR I/O	
USB	4 x USB 3.0 (H310) / 4 x USB 3.1 Gen 2 (Q370)
DISPLAY I/O	1 x HDMI 1.4 / 2 x DisplayPort 1.2
AUDIO I/O	1 x Mic-in / 1 x Line-out

## PH14FEI (PH14FEI) Specifications

INTERNAL CONNECTORS	LAN I/O	2 x RJ-45	
	SERIAL PORT	-	
	PS/2 PORT	-	
	OTHERS	DC-in 12V(DIN 4-pin)	
	STORAGE	2 x SATAIII	
	USB	5 x USB 2.0 (Q370) / 4 x USB 2.0 (H310)	
	DISPLAY I/O	1 x LVDS (*Optional eDP SKU available) / 1 x Backlight Connector	
	AUDIO I/O	1 x Stereo Speaker Header	
	SERIAL PORT	4 x RS232 (Two supports RS232 / 422 / 485 select by BIOS)	
	PARALLEL PORT	-	
POWER REQUIREMENT	GPIO	1 x MiAPI Header (Programmable. Support 10-bit GPIO)	
	FAN	1 x 4-pin CPU Fan Header / 1 x 4-pin System Fan Header	
	POWER	1 x AT / ATX Mode Select Jumper / 1 x 4-pin ATX Power Connector	
	OTHERS	1 x CMOS Jumper / 1 x Front Audio Header (Mic-in & Line-out) / 1 x panel power select header / 1 x backlight power select header, / 1x buzzer header	
	POWER INPUT	*optional 12V-24V via DC to DC power board / DC-in 12V(DIN 4-pin)/ ATX 4-pin 12V	
	ENVIRONMENTAL	OPERATING TEMPERATURE	0 ~ 60°C (32 ~140°F)
		STORAGE TEMPERATURE	-40 ~ 85°C (-40 ~185°F)
		OPERATING HUMIDITY	10% ~ 95% R/H (Non-condensing)
	OS	CERTIFICATION	CE / FCC Class B
		OS SUPPORT	Windows® 10 64-bit / Linux (support by request)

## **PH14FEI (PH14FEI) Specifications**

### **PACKING LIST**

### **PACKAGE**

1 x Motherboard / 1 x 50  
cm SATA Cable / 2 x I/O  
Bracket (Half and Full  
Height) / 1 x Driver CD  
/ 1 x Quick Installation  
Guide