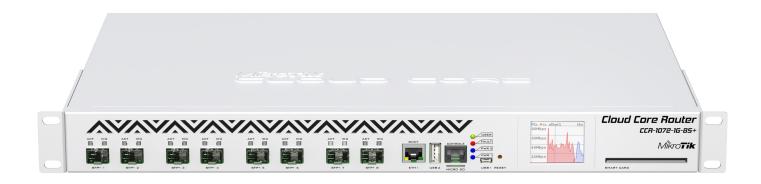# CCR1072-1G-8S+

Our new flagship router, the CCR1072, is powered by a Tilera 72 core CPU, each core is clocked at 1GHz, and to fully utilise this power, the CCR1072 is equipped with eight independently connected 10G SFP+ ports.

Thanks to the unique 72 core processor and ports that are directly connected to the CPU, CCR1072 is capable of over 120 million packets per second throughput.

Full set of features

- 8x SFP+ ports
- 16GB ECC RAM
- Ports directly connected to CPU
- microSD and 2x M.2

Highest performance

- over 120 million pps packet throughput
- up to 80 Gbps throughput

New generation CPU

- 72 core CPU
- 1 GHz clock per core
- State of the art TILE GX architecture

The unit comes equipped with two removable (hot plug) power supplies for redundancy, smart card slot, eight SFP+ ports and 16GB of built in ECC RAM.

The CCR1072 also has two built-in M.2 slots, microSD and 2x USB for adding storage, to use for proxy cache, user manager and other features. The M.2 slots accept 800mm Key-M x4 PCIe 2.0 modules.

Specifications

Product code	CCR1072-1G-8S+
CPU nominal frequency	1 GHz
CPU core count	72
Size of RAM	16 GB
Storage	128 MB Onboard NAND, also see *expansion*
10/100/1000 Ethernet ports	1
Power supply	2x IEC C14 standard connectors 110/220V (Two redundant PSU)
Supported input voltage	12 V
CPU temperature monitor	Yes
PCB temperature monitor	Yes
Voltage Monitor	Yes
Current monitor	Yes
Dimensions	443x315x40mm, weight: 3.8 kg, weight with packaging: 5.125 kg
License level	6
Operating System	RouterOS
CPU	Tilera Tile-Gx72 CPU
Max Power consumption	100 W
Display	Color LCD, touchscreen
SFP	8x 10G Ethernet SFP+ cages (Mini-GBIC; SFP module not included), DDMI support
Expansion	1x microUSB 2.0, 1x regular USB 2.0, full size Smart Card slot, microSD slot, 2x M.2 slots with x4 PCIE 2.0, Key-M, module size support: 2242,2260,2280
Serial port	RJ45
Suggested price	$3,050

Included

2x IEC cords

Screw and feet kit

Rackmount ears

Performance test results

CCR1072-1G-8S+		Tile 72 Core (1200Mhz, DDR1333) Max possible throughput					
Mode	Configuration	1518 byte		512 byte		64 byte	
		Mbps	kpps	Mbps	kpps	Mbps	kpps
Bridging	none (fast path)	78,960.3	6,502.0	76,963.8	18,790.0	60,952.4	119,047.6
Bridging	25 bridge filter rules	74,448.8	6,130.5	33,557.3	8,192.7	5,293.8	10,339.5
Routing	none (fast path)	78,960.3	6,502.0	76,963.8	18,790.0	44,291.6	86,507.0
Routing	25 simple queues	78,960.3	6,502.0	50,669.2	12,370.4	6,898.8	13,474.2
Routing	25 ip filter rules	56,683.3	4,667.6	24,515.0	5,985.1	3,007.4	5,873.8

1. All tests are done with Xena Networks specialized test equipment (XenaBay),and done according to RFC2544 (Xena2544)
2. Max throughput is determined with 30+ second attempts with 0,1% packet loss tolerance in 64, 512, 1518 byte packet sizes
3. Values in Italic indicate that max throughput was reached without maxing out CPU, but because board interface configuration was maxed out
4. Test results show device maximum performance, and are reached using mentioned hardware and software configuration, different configurations most likely will result in lower results