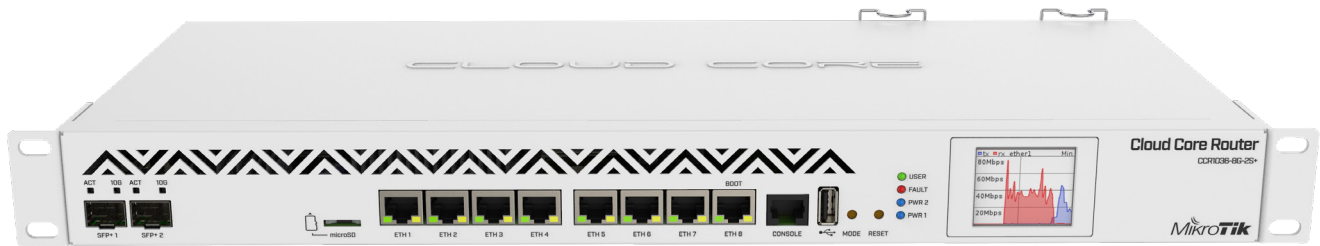


CCR1036-8G-2S+

The CCR1036-8G-2S+ is a high performance networking router with eight Gigabit ports, two SFP+ ports for 10G connectivity and dual power supplies for redundancy. Powered by a 36 core CPU, this router is able to perform the most complicated routing and management tasks, for managing large networks with high bandwidth requirements.



Each of its ports is directly connected to the Tilera networking CPU, with no ports sharing any bandwidth, guaranteeing the best performance and highest reliability. The CPU supports IPsec hardware accelerated encryption, so you can use it also as a high performance VPN gateway to ensure the best encryption between important locations, without sacrificing connection speed.



The M.2 slot allows to install a high speed SSD disk, for using a local user database, proxy storage or for other features. Two versions are available, depending on the required RAM amount:
4 GB for CCR1036-8G-2S+ and 8 GB for CCR1036-8G-2S+EM.

Comparing to the previous model, the new CCR1036 series has a full size USB port, redundant power supplies with improved design, RJ45 serial port and general improvements in durability, efficiency and reliability.

Specifications

| | | |
|-----------------------|-----------------------------|------------------|
| Product code | CCR1036-8G-2S+ | CCR1036-8G-2S+EM |
| CPU | 36 cores TLR4-03680 1.2 GHz | |
| RAM | 4 GB | 8 GB |
| Storage | NAND 1 GB | |
| Dimensions | 355 x 145 x 55 mm | |
| Operating temperature | -20°C .. +60°C tested | |
| Operating system | RouterOS | |
| License level | 6 | |

Interfaces

| | |
|----------------------------|--------------|
| 10/100/1000 Ethernet ports | 8 |
| 1G/10G SFP+ ports | 2 |
| M.2 slots | 1 PCIe x4 |
| Memory card slots | 1 microSD |
| USB ports | 1 USB type A |
| Serial ports | 1 RJ45 |

Powering

| | |
|-------------------------|---------------|
| Supported input voltage | 100 V - 240 V |
| Number of AC inputs | 2 |
| Max power consumption | 73 W |

Other

| | |
|-------------------------|-----|
| CPU temperature monitor | Yes |
| PCB temperature monitor | Yes |

Performance test results

| CCR1036-8G-2S+ | | Tile 36 core max possible throughput test | | | | | |
|----------------|------------------------|---|---------|----------|---------|---------|---------|
| Mode | Configuration | 1518 byte | | 512 byte | | 64 byte | |
| | | kpps | Mbps | kpps | Mbps | kpps | Mbps |
| Bridging | none (fast path) | 2275.7 | 27636.1 | 6578.9 | 26947.2 | 41666.7 | 21333.4 |
| Bridging | 25 bridge filter rules | 2275.7 | 27636.1 | 5179.7 | 21216.1 | 5163.5 | 2643.7 |
| Routing | none (fast path) | 2275.7 | 27636.1 | 6578.9 | 26947.2 | 41666.7 | 21333.4 |
| Routing | 25 simple queues | 2275.7 | 27636.1 | 6553.3 | 26842.3 | 7643.1 | 3913.3 |
| Routing | 25 ip filter rules | 1825.7 | 22171.3 | 3033.9 | 12426.9 | 3049.7 | 1561.4 |

| CCR1036-8G-2S+ | | CCR1036 series IPsec throughput | | | | | |
|----------------|----------------------|---------------------------------|---------|----------|--------|---------|-------|
| Mode | Configuration | 1400 byte | | 512 byte | | 64 byte | |
| | | kpps | Mbps | kpps | Mbps | kpps | Mbps |
| Single tunnel | AES-128-CBC + SHA1 | 130.5 | 1461.6 | 123.4 | 505.4 | 115.4 | 59.1 |
| 256 tunnels | AES-128-CBC + SHA1 | 912.9 | 10224.5 | 1037.4 | 4249.2 | 1053.1 | 539.2 |
| 256 tunnels | AES-128-CBC + SHA256 | 902.7 | 10110.2 | 1032.8 | 4230.3 | 1025.7 | 525.2 |
| 256 tunnels | AES-256-CBC + SHA1 | 901.0 | 10091.2 | 1028.3 | 4211.9 | 998.2 | 511.1 |
| 256 tunnels | AES-256-CBC + SHA256 | 892.5 | 9996.0 | 982.9 | 4026.0 | 970.7 | 497.0 |

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

Included parts



2 IEC cords



Rack ears



Screw kit