

CISCO uBR MC20X20V

BROADBAND PROCESSING ENGINE WITH FULL DOCSIS 3.0



The Cisco uBR MC20X20V Broadband Processing Engine (BPE) is a next generation line card for the Cisco uBR 10012 Universal Broadband Router. It adds exciting features to the Cisco uBR10012 platform, including 20 upstream (on 20 dedicated physical ports) and 20 downstream channels (on five physical ports). The line card provides the capability to have 160 downstream and 160upstream interfaces in a single Cisco uBR10012 chassis and when used with the DOCSIS 3.0 capable Cisco 1 Gbps Wideband Shared Port Adapter (SPA), can scale to 304 downstream channels.

Fully DOCSIS 3.0 Capable

Fully DOCSIS and Euro-DOCSIS 3.0 capable, the line card supports bonding of four, eight, and even higher number of channels, and other DOCSIS 3.0 features including IPv6, multicast, and SCDMA.

Superior Downstream RF Performance

The Cisco uBR-MC20X20V offers an upconverter module which is based on industry leading Direct Digital Synthesizer (DDS) technology. DDS technology offers superior RF performance in a much smaller footprint than older analog designs. The upconverter also operates all the way to 1 GHz.

DOCSIS 3.0 MAC

The DOCSIS 3.0 MAC on the Cisco uBR-MC20X20V is an internally developed Cisco feature providing dedicated MAC layer hardware for line rate performance in large scale deployments. The DOCSIS 3.0 MAC hardware enables scalability for thousands of cable modems and CPE, simultaneously providing hardware acceleration for sophisticated security features including AES encryption while continuing to support older DOCSIS 1.x and 2.0 encryption features. Cisco's DOCSIS 3.0 MAC design allows for unprecedented feature flexibility and robust defect correction.

PHYSICAL

Occupies a single Slot in the Cisco uBR10012 Chassis
Interface: Line Card Single Mode with intermediate Reach Connector
Hot- swappable; no slot Dependency
Weight: 16 lb (7.26 kg)
Dimensions (H x W x D): 20 x 1.36 x 16 in. (50.80 x 3.55 x 10.64 cm)

POWER

Unit Power: 230W at 40°C

RELIABILITY AND AVAILABILITY

Designed for five 9s of Availability

ENVIRONMENTAL

Operating Altitude: -197-13,123 ft (-60-4000m)
Storage Temperature: --4-149°F (-20-65°C)
Operating Temperature, nominal: 41-104°F (5-40°C)
Storage relative Humidity: 5-95%
Operating relative Humidity: 10-90%

SOFTWARE RELEASE

Cisco IOS® Software Release 12.2(33)SCC or later