

CPS 200

Customer Premises Switch

In broadband networks, fibre is the optimal physical medium, Ethernet dominates connectivity and IP is the protocol of choice. These broadband networks are commonly called Fibre To The Home, Business, or Building. We call them True Broadband Networks.

True Broadband Networks pose different challenges than simple Enterprise or CATV/ADSL networks. When many thousands of customers have access to high capacity and multiple services via numerous service providers, it is essential to have absolute control of the network.

With regard to the specific challenges found in these networks, PacketFront offers its complete **Intelligent Broadband Solution** with a broad range of integrated functionalities. The solution provides unique technical features, keeps the investment and operational costs low and gives maximum flexibility to create differentiated services and increased revenues. While supporting an operator independent infrastructure, it also opens up possibilities for new business models.



The CPS 200 series Customer Premises Switch is the first cost-effective, multi-service switch for True Broadband Networks. The CPS 200 is a high-performance, L2 non-blocking switch with added functionalities, such as IGMP snooping for multicast pruning and pre-defined QoS per port. The CPS 200 connects to the broadband network via Ethernet over twisted pair or fibre. Eight pre-defined ports are used for connecting set-top boxes, gaming consoles, VoIP gateways, PCs, and other devices.

In addition to the CPS 200, the PacketFront solution consists of:

- ASR 4000 – a series of purpose-built broadband routers
- BECS™ – an integrated management and control system.

As the PacketFront ASR 4000 offloads the CPS 200 by its extensive feature set, the requirements and costs of the CPS 200 are greatly reduced. Featuring supervision by PacketFront Device Protocol (PFDP) from BECS™, the Fibre To The Home

links to each individual apartment – and consequently to all CPS 200 client ports – can be monitored by the operator.

The CPS 200, in combination with BECS™ and ASR 4000, offers the world's first commercial service-provider and operator independent IP network architecture. To speed up the pace of evolution, contribute to our customers' success and global deployment of IP, fibre and Ethernet, PacketFront offers an out of the box **Intelligent Broadband Solution**.

Key benefits

Purpose-built

The CPS 200 is tailored to the specific challenges in the subscriber layer of the True Broadband Network. PacketFront has focused on areas such as distribution of multicast services, integrated fibre interface, Quality of Service (QoS), traffic separation, operation and maintenance costs, manageability, price level, and mechanical design.

Service Functionality

The CPS 200 is developed for the pruning of multicast traffic and traffic separation between voice, video, gaming, and data through the port-based QoS features. A short delay and wire-speed-switching performance provide secure delivery of multimedia services to customer devices.

Provisioning and Management

The CPS 200 is managed by using PacketFront Device Protocol (PFDP) via the ASR 4000 broadband router. BECS™, Broadband Ethernet Control System, provides the interface for troubleshooting of the CPS 200. MAC addresses, port status, multicast forwarding tables, and speed/duplex relation can be monitored. The CPS 200 has furthermore been designed to limit provisioning efforts. The CPS 200 has pre-defined ports for TV, voice, data, and game devices, thus making provisioning and configuration of the devices unnecessary.

Performance Cost

The CPS 200 was designed to be a cost-effective product for the delivery of services

in True Broadband Networks. By developing a product that supports all the necessary features for distribution of common broadband services, PacketFront enters the market with the first purpose-built, multi-service home switch for True Broadband Networks.

CPS 200 series, Customer Premises Switch

Product models

CPS 218C

8 10/100BaseTX ports

CPS 229FM

8 10/100BaseTX ports
1 100BaseFX MM MTRJ port

CPS 239FV

8 10/100BaseTX ports
1 100BaseFX MM VF-45 Volition port

CPS 249SFV

8 10/100BaseTX ports
1 100BaseSX SM VF-45 Volition port

CPS 259SFM

8 10/100BaseTX ports
1 100BaseFX SM MTRJ port

CPS 269SRS

8 10/100BaseTX ports
1 100BaseFX SM SC Single Fibre
Bi-directional SC port

Technical data

Performance

1.8 Gbps non-blocking L2 switching
bandwidth
Wire speed HW port based QoS
2000 MAC addresses
256 kB packet buffer memory

Protocol & Standards

802.3 10BaseT
802.3u 100BaseTX and 100BaseFX
IGMP snooping
PFDP

Physical Dimensions

(H) 2.45 * (W) 23.0 (D) 15.0 cm
Weight: 0.6 kg
Wall mountable

Power and Safety Regulations

90-240 VAC 50-60Hz

Acoustic

<10dB noise