

FiberSurf[™] XON2100.RVC

**IP Router, VPN,
Voice over IP,
CATV**



BKtel's *FiberSurf*[™] XON2100.RVC optical network unit delivers high-speed internet and full-spectrum CATV in FTTH (Fiber-To-The-Home) access networks. It combines a 100Base-FX to 10/100Base-TX router, VPN, Voice over IP telephony and a broadband optical television (CATV) receiver, allowing up to 15 kilometers single-mode fiber connectivity.

Leading Edge
Technology

- ✦ full, dedicated 100 Mb/s wirespeed layer 3 routing, VPN, Voice over IP telephony and broadband CATV reception with high output level (capable to supply multiple TV sets) in one unit

Compact

- ✦ small size and wall mountable, ideal for office, apartment or basement installation

Solid

- ✦ strong durable metal case securely protects sensitive fiber optics and electronics

Modular

- ✦ combined with the *FiberSurf*[™] XON10 Fiber Protection Unit easy interchangeable with other units of the *FiberSurf*[™] product family

Key Features

Layer 2 Ethernet Switch

- ▶ 100Base-FX WAN interface
- ▶ Four Ethernet LAN ports with 10/100Base-TX support
- ▶ Integrated 10/100Mbps QoS Ethernet switch with wirespeed packet switching
- ▶ Auto-negotiation ability to select half/full-duplex and 10Base-T/100Base-TX mode

Layer 3 Operation

- ▶ High speed Layer 3 routing
- ▶ Network Address Translation (NAT)
- ▶ Stateful Inspection Firewall
- ▶ IPSec/VPN passthrough
- ▶ Static and dynamic IP address assignment
- ▶ Web-Based-Management for router settings

VPN

- ▶ VPN Server and Client

Telephony with VoIP

- ▶ Two simultaneous voice over IP (VoIP) calls
- ▶ SIP 2.0 VoIP protocol

Optical CATV Receiver

- ▶ Optical CATV home receiver for multichannel television and radio signals like AM-VSB, FM and QAM
- ▶ Ultra low noise push-pull technology
- ▶ Very low distortion
- ▶ Wide range of optical input power
- ▶ Single-mode fiber, high return loss optical interface

Specifications

CATV Receiver Module

Fiber type	Single mode 9/125 μm
Optical connector	SC/APC
Optical input wavelength	1280 ... 1600 nm
Optical input power	typ. -10 dBm
RF connector	F female
RF impedance	75 Ω
RF bandwidth	47 ... 862 MHz
Receiver noise current	4,5 pA/ $\sqrt{\text{Hz}}$
RF output level*	$\geq 88 \text{ dB}\mu\text{V}$

Ethernet Transceiver Module

Fiber type	Single mode 9/125 μm
Optical WAN connector	SC/PC
Ethernet wavelength	TX: 1260..1360nm, typical 1310nm RX: 1480..1600nm, typical 1550nm
Standard compliance	IEEE802.3u 100BASE-FX

LAN Twisted Pair Interface

Standard compliance	Fully compliant with IEEE802.3 10Base-T, IEEE802.3u 100Base-TX/FX standards and IEEE802.3x
Mode	Auto-negotiation, auto-cross-over, half/full-duplex, integrated four-port store and forward switch

Connector	4 x RJ-45
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VPN	VPN Server and Client (IPSec, PPTP) VPN passthrough
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Telephony Interface	G.711 a-Law and μ -Law (64kbps) and G.729a/b (8kbps) voice codecs
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Connector	2 x RJ-11 (POTS)
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Management	Integrated Web Server, SNMP Agent, Remote software upgrade via HTTP
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Physical and Environmental

Dimensions (Height, Depth, Width)	150 mm x 32 (44) mm x 242 mm
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Weight	1430 g
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Power Supply	24 VAC / 0.75 A
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Power Consumption	<10W
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Installation Requirements	<i>FiberSurf</i> XON10.W Fiber Protection Unit CAT5 network cables External plug-in wall adapter, input: 220-240 VAC / 50-60Hz, output 24 VAC
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*) @-5 dBm, 1550 nm, OMI = 4%