

# BroadGate<sup>®</sup> - BG-20B/E

## Miniature Optical Service Access Platform

- **Carrier-class Ethernet over WAN/MAN** – SDH reliability, security, and management of data services
- **Profit booster** – a tiered configurable service offering over existing infrastructures
- **Cost conscious** – reduced footprint, minimal power consumption, and full remote management for lowest OAM&P expenses
- **Cross-connect (DXC 1/0) capability** – supporting a rich mix of low bitrate interfaces
- **Scaleable awareness** – adding new services by coupling BG-20E to BG-20B, scaling bandwidth seamlessly from STM-1 to STM-4

Targeting a range of enterprises, cellular carriers, and utility companies, the BG-20 yields handsome profits and effortless expansion.



# You're in the money with **BG-20!**

## **POWER TO THE WAN/MAN**

Fast, reliable, flexible, and scalable data connectivity across the WAN/MAN is causing a surge in bandwidth demand, creating new revenue-generating opportunities. Ethernet has become the clearly identifiable standard for data communication in the corporate LAN. Consequently, service providers as well as enterprises need enhanced Ethernet connectivity both for reaching end-users and for connecting their Points Of Presence (POPs).

The introduction of standard Generic Framing Procedure (GFP) mapping, virtual concatenation, and Link Capacity Adjustment Scheme (LCAS) for dynamic bandwidth allocation creates a new window of opportunity for carrier-class Ethernet services over SDH.

ECI Telecom Transport Networking Division's BroadGate BG-20B (Basic unit) fulfills the imminent need for reliable LAN connectivity by providing carrier-class Ethernet services over SDH. The BG-20E (Expansion unit) is the quick and easy add-on unit for instant scalability. The BG-20 delivers an array of profitable services, including:

- Dedicated Ethernet services
- Shared Ethernet services
- Point-to-multipoint (ISP connectivity)
- Multipoint-to-multipoint (Ethernet-LAN or Virtual Private Network)

These services benefit from ultra-reliable telecom manageability, security, and reliability, and ensure voice and data connectivity between geographically distributed locations.

## **GET SMART WITH INTELLIGENT ETHERNET MAPPING**

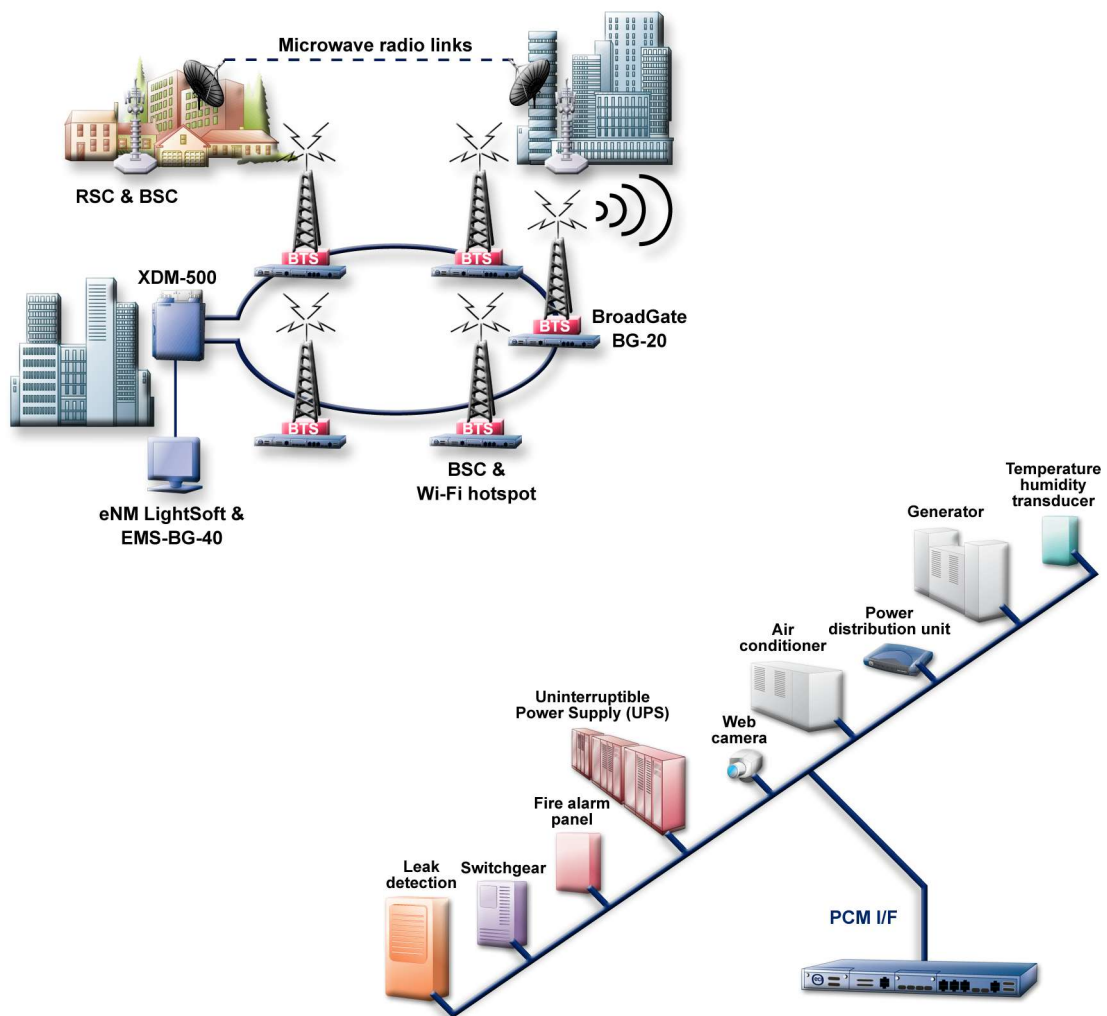
The BG-20 is a unique, fully integrated SDH multiplexer designed for access networks and enterprise CPEs, with Layer 1 transport and Layer 2 switching intelligence. It functions as an STM-1 to STM-4 ADM or TM, providing PCM, TDM, 10/100BaseT, and Gigabit Ethernet services. Ethernet signals are mapped onto n\*VC-12/VC-3 containers using VCAT and LCAS standards. The BG-20 scalable architecture effectively expands existing networks, helping you provide new services and tailor solutions to the needs of medium and large enterprises.

## **TOTAL XDM® INTEGRATION**

When deployed in XDM networks, the BG-20 enables you to benefit from a truly scalable build-as-you-grow™ solution, complete with SDH, WDM, and data (Ethernet, IP, ATM, SAN) services from metro-access and customer premises to metro core. And when operated under LightSoft® multidimensional network management system, it enables you to achieve full end-to-end control of all physical and technology layers.

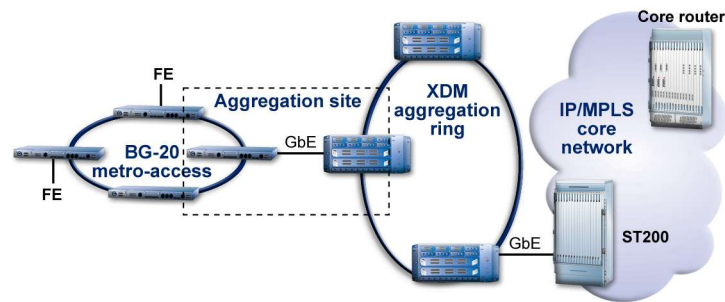
## BEST CHOICE FOR CELLULAR NETWORK OPERATORS

BG-20 is particularly suitable for building Radio Access Networks (RANs). It is compact and resilient, making it perfect for both indoor and outdoor enclosures. Supporting the entire range of E1/E3/DS-3/STM-1/4 TDM services, it consolidates data and TDM traffic for a shared infrastructure and handles advanced data services with superb efficiency. The DXC 1/0 cross-connect and PCM low bitrate interfaces enable remote control and monitoring of various types of Base Transceiver Station (BTS) and Base Station Controller (BSC) equipment, eliminating the need for conversion units and saving considerably on CAPEX and OPEX.



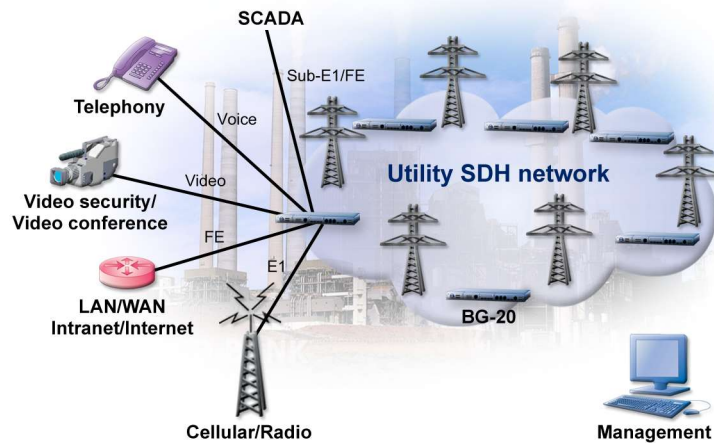
## BREAKING NEW GROUND IN CARRIER-CLASS ETHERNET

One of the prominent features of the BG-20 is its Layer 1 and Layer 2 capabilities that offer carriers a clear migration path from pure TDM-based legacy services to new value-added data services. These capabilities support Ethernet private lines, Ethernet virtual private lines using shared bandwidth, and Ethernet private LAN/Ethernet virtual private LAN services extending corporate LANs over the WAN. All services are offered with Quality of Service (QoS) and Service Level Agreement (SLA) assurances.



## EXTENDED UTILIZATION

Utility companies, like railway, electricity, and gas operators require ultrareliable Ethernet and data connectivity for various mission-critical applications and functions. These companies can further exploit their infrastructure for voice and data services within their VPN while offering profitable connectivity services to the public. The BG-20 embedded DXC 1/0 cross-connect, with its PCM interfaces for low bitrate data, PABX extensions, and hotline phone, makes this possible.



## LIGHT UP YOUR ENTERPRISE SERVICES!

Enterprises are currently looking to optical connectivity services as a solution for their mission-critical applications and for connecting to remote sites and to the Internet. They are deploying fibers on their campuses and leasing fiber connections or high bandwidth from several metro operators.

To fulfill these application and connectivity-service requirements, a high-grade robust and scaleable optical CPE is required. BG-20, with its TDM and Ethernet interfaces and highly versatile management, provides the ideal solution for all enterprise needs. With BG-20B installed at remote branches and BG-20E at central and larger sites, enterprises and integrators can now achieve full connectivity and security in their networks.

The BG-20 accomplishes these feats from a single compact unit, while all backbone requirements are served by the excellent line of XDM equipment.

The BG-20 is the perfect solution for service providers, utilities, and cellular operators looking to increase revenue streams.

