

Dual optical receiver with Ethernet management

If you are looking for a compact size fibre optic receiver with extensive features and functionality, such as Ethernet management and optical back up operation, we would like to introduce the CXE852. The newcomer CXE852 dual fibre receiver responds to the market demands for manageable FTTB networks that combine high performance with extended reliability. The combination of high output level, monitoring and control of the receiver and external devices through standard Ethernet interface as well as two optical front ends with automatic switch for back up operation make the compact size receiver unique in its category.



Enviably performance and functionality in a small package

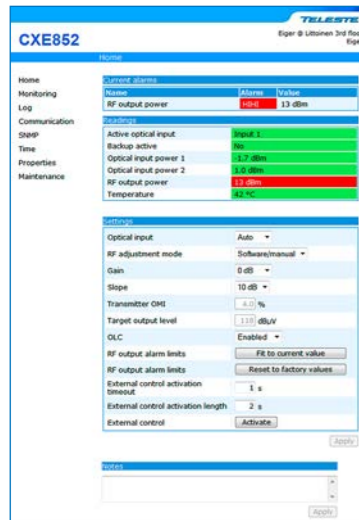
The new CXE852 fibre optic receiver will meet your requirements for a managed redundant deep fibre architecture, that is cost effective and easy to implement and use.

CXE852 is a compact high performance, unidirectional dual fibre optic receiver with optical back up operation and Ethernet management. It features an 1006 MHz bandwidth and two integrated optical receivers. The use of integrated optical receivers eliminate time-consuming mounting of connectors and fibre splicing inside the housing. The optical receivers support light wavelengths from 1290 nm to 1600 nm.

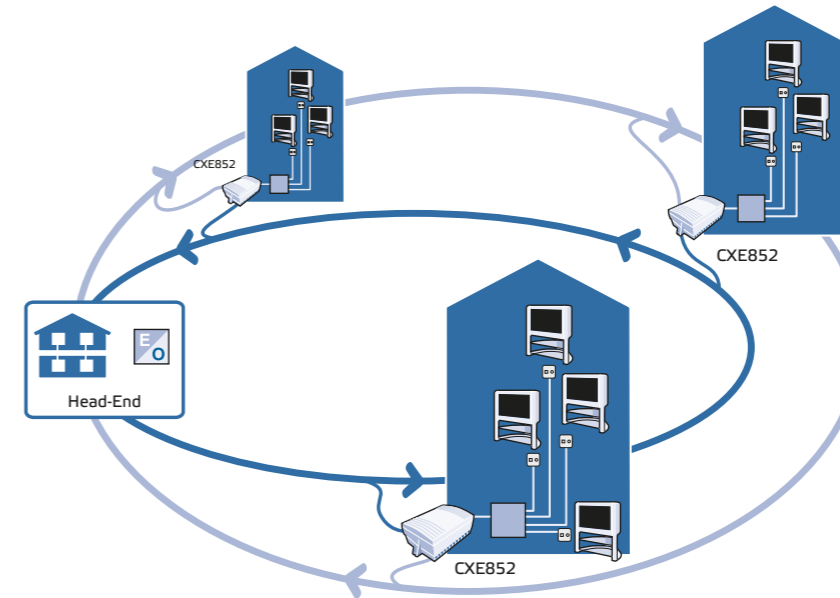
The operational concept of CXE852 is based on the idea that the greatest possible reliability and lowest maintenance requirement is achieved by abandoning the use of variable attenuators. Automatic Optical Level Control (OLC) as well as gain and slope adjustments use field-proven electrical controls that improve reliability.

The local user interface provides access to a confident and easy operation. An optical power DC test point together with the optical received power LED enable you to quickly determine the status of the receivers. To simplify configuration the unit is designed with an integrated support for SNMP monitoring and configuration. The external Ethernet interface in the unit itself enables local control with laptop, allowing fine-tuning the unit. The receiver also provides a gateway to access it remotely. Our CATVisor Commander PC software offers a user friendly interface which enables configuration management as well as control over all vital function parameters. Additionally an outside/external device can be monitored and controlled by the CXE852. It's especially designed to be able to manage an external Ethernet switch that is located in the same premises.

The CXE852 dual fibre optic receiver displays a high performance design with low noise current density and a high output level. A -20 dB test point enables measurements of the RF output level.



The external Ethernet interface in the unit itself enables local control with laptop. In addition to CATVisor Commander, CXE852 offers a simple web browser user interface which can be used to read and adjust RF controls and to monitor the status of the unit. It is also possible to update the unit software via WebUI.



Dual receiver for backup operated and managed FTTB networks

A simplified example of a backup fibre-based (FTTB) access network. The CXE852 receivers are typically placed in a suitable location near/on the premises and are connected to customers via existing coaxial cables.

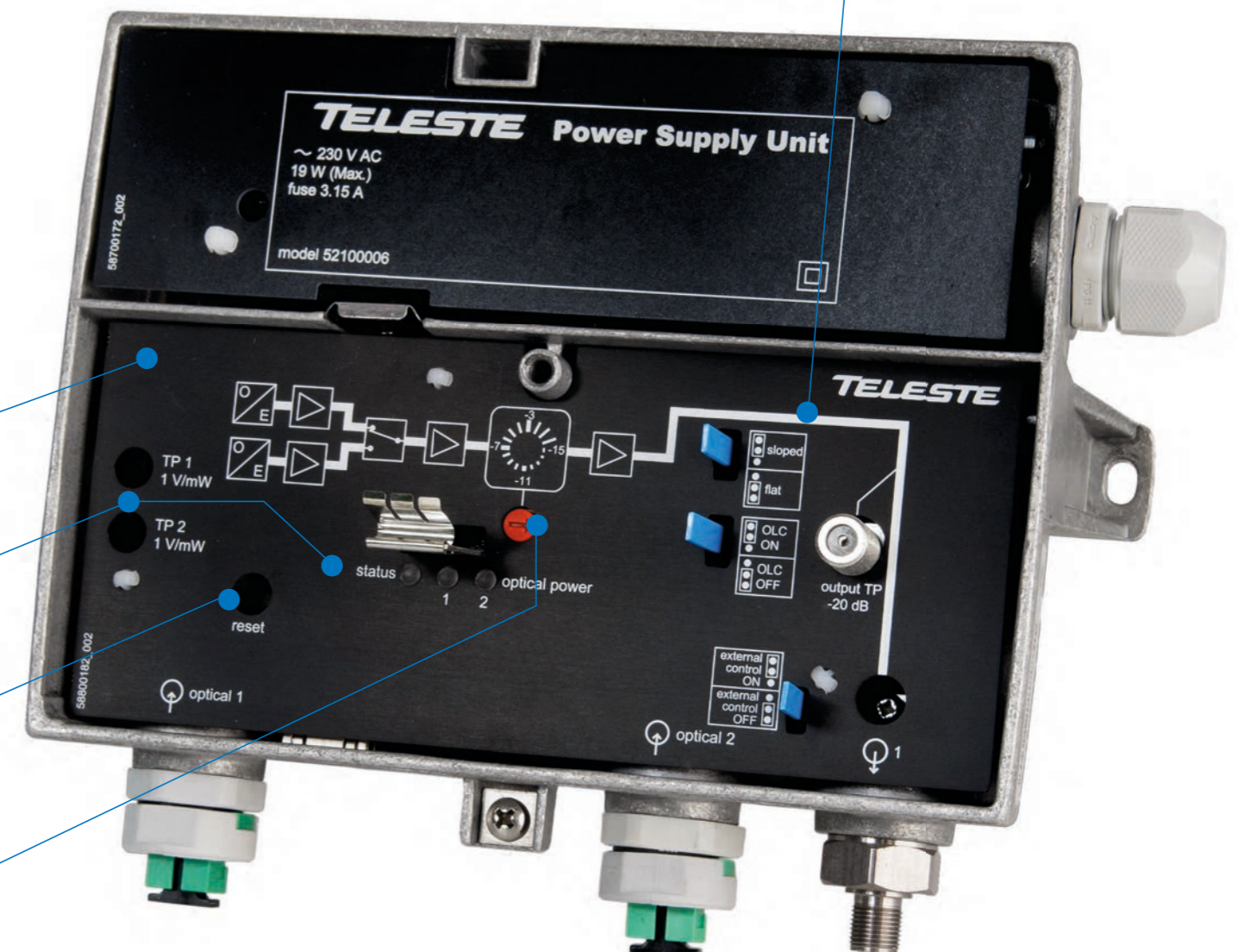
No need for usual plug-in accessories in system set-up.

Two integrated optical receivers, both 1310 nm and 1550 nm technologies, with automatic switching for back up operation.

LED indicators and DC test points for optical input power are easily accessible for quick and convenient monitoring.

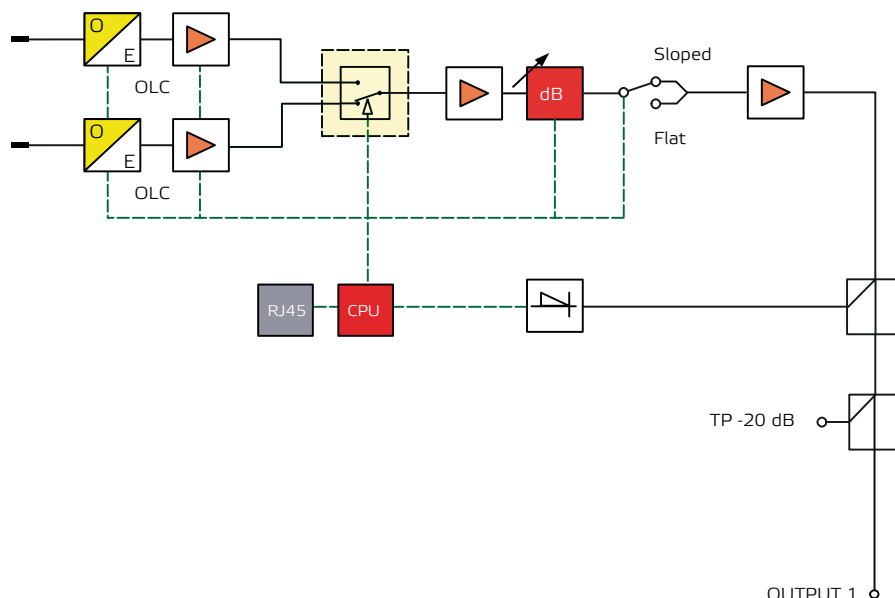
The reset button can be used to restore RF controls to hardware control, to reset communication settings back to factory values or to reset all settings back to factory values.

OLC (Optical Level Control) in the CXE852 fibre receivers is designed to deliver maximized performance by delivering a stable output.



Features

- Lightweight and compact design
- Two optical receivers with automatic switch for backup operation
- Optical Level Control (OLC) based on optical input power
- DC test point and LED indicator on optical receivers
- High gain and RF output power with GaAs MESFET technology
- Low noise current density
- No additional plug-ins
- Efficient ESD and Surge protection



Technical specifications

CXE852 DUAL OPTICAL RECEIVER WITH ETHERNET MANAGEMENT

Downstream signal path

Light wavelength	1290...1600 nm	Mid-stage slope	0 / 10 dB
Optical input power range	-7...+1 dBm	Flatness	± 0.5 dB
Frequency range	47...1006 MHz	Test point	-20 dB
Return loss	18 dB	Noise current density	6 pA / v Hz
OLC limited output level	115 dBμV	CTB 42 channels	113 dBμV
Gain limited output level (without OLC)	120 dBμV	CSO 42 channels	113 dBμV
Level adjustment	0...-15 dB	XMOD 42 channels	110 dBμV

Management features

- LED indicators for optical level and device status
- SNMP monitoring and configuration via standard Ethernet interface
- Web browser user interface for adjustment and software download
- DHCP client for automatic IP address assignment, with AutoIP
- Optical input power measurement with alarms
- RF output power measurement with alarm
- Internal temperature measurement with alarms
- Local power supply monitoring with alarm
- Monitoring of OLC, gain and slope settings with override possibility
- Uptime, total uptime and reset counters for power outage statistics
- Automatic alignment based on transmitter OMI and target output level
- Intelligent RF output level alarm limits settings
- 10/100Base-T Auto-MDI/MDI-X connection

General

Power consumption	15 W	Weight	1.6 kg
Supply voltages	26...65 VAC / ±30...90 VDC, or 165...255 VAC	Operating temperature	-40...+55 °C
Connectors / RF	F female	Class of enclosure	IP31
/ Optics	SC/APC	EMC compatibility	EN50083-2
/ Ethernet	RJ45	ESD	4 kV
Dimensions (h x w x d)	148 mm x 210 mm x 84 mm	Surge	6 kV

