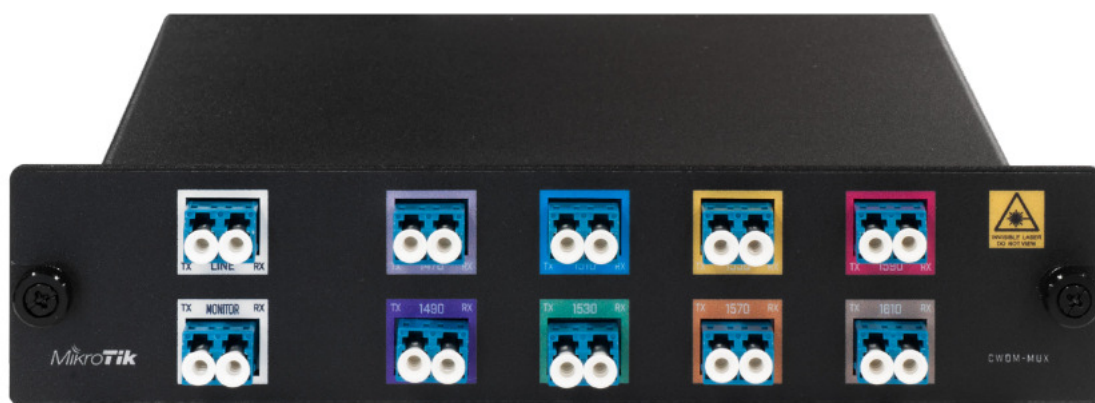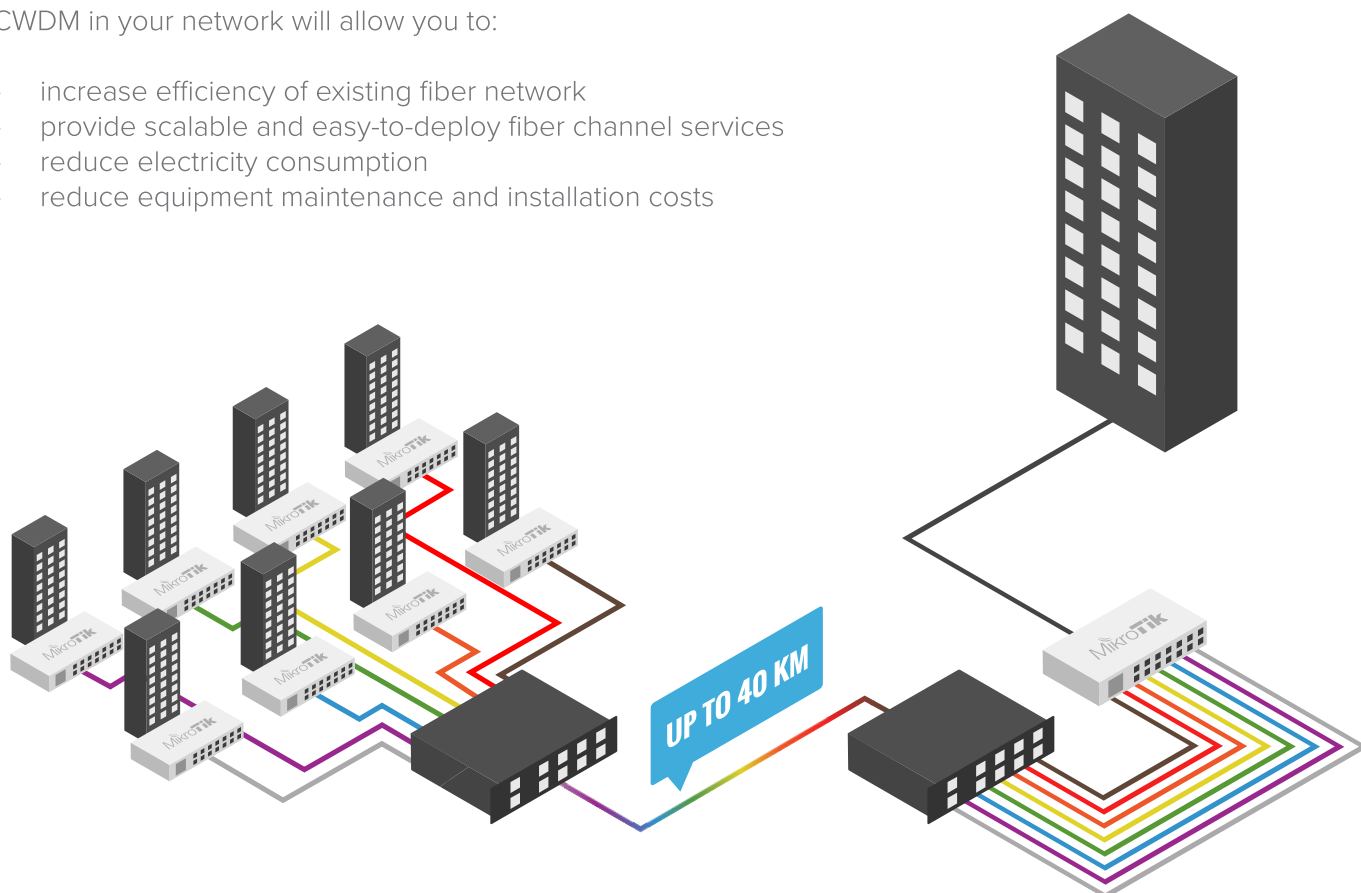# CWDM

The CWDM is a passive MUX/DEMUX unit, which allows to combine up to eight fiber links into one, to simplify and reduce the cost of long distance fiber installations. At the other location, the combined line is split back up again, so that instead of eight long fiber lines, you would only need one. The Coarse Wavelength-Division Multiplexing (CWDM) technology offers a solution which will increase capacity of existing fiber infrastructure by enabling multiple channels/wavelengths over the same fiber cabling and will reduce costs for a new fiber optic deployment.

CWDM in your network will allow you to:

- increase efficiency of existing fiber network
- provide scalable and easy-to-deploy fiber channel services
- reduce electricity consumption
- reduce equipment maintenance and installation costs

Our CWDM solution enables up to 8 channels for transmitting and receiving signals, with the wavelengths from 1470 nm to 1610 nm. A duplex fiber cable links two dual-fiber CWDM MUX/DEMUXs units, supporting the same wavelengths installed on each end of the fiber optic network. In each CWDM unit is a filter, which is tuned for a specific wavelength which is why it is important to connect the correct wavelength to the corresponding port.

You can use a single optical fiber cable to create up to eight independent 1.25Gbps SFP (up to 40km) or 10Gbps SFP+ (up to 10km) links, offering more affordable alternative to installing more fiber or leasing additional fibers. You can even use 1.25Gbps modules and 10Gbps modules at the same time.

CWDM MUX/DEMUX modules are passive devices and there is no power source required.

Our product range includes CWDM-MUX8A, the 8-port CWDM MUX/DEMUX unit (supports both SFP and SFP+ which can be mixed at the same time), CWDM-CHASSIS-2, a 1U Chassis bracket (can hold two CWDM-MUX8A units). Eight different SFP CWDM transceivers (1.25G, Single Mode, 40km range, Dual LC-connector DDM, range from 1470-1610nm, same wavelength pair required for a link) and eight different SFP+ CWDM transceivers (10G, Single Mode, 10km range, Dual LC-connector DDM, range from 1470-1610nm, same wavelength pair required for a link).