

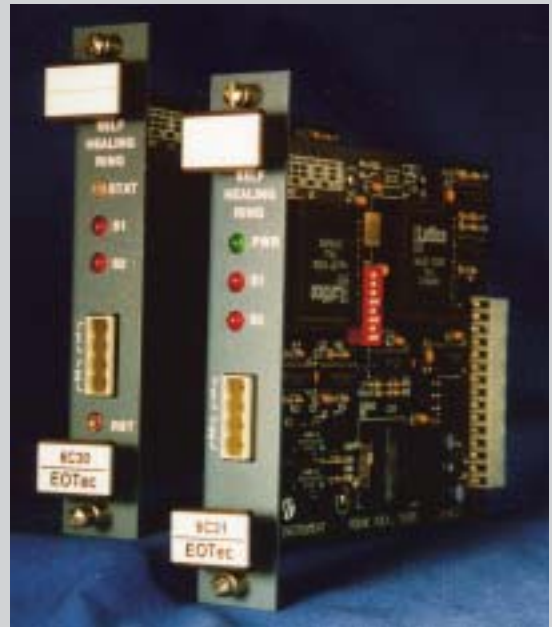


Weed  
Instrument

Temperature, Pressure, and Fiber Optic Technology

# 6C30/31 Modular Self-Healing Fiber Optic Modem EOTec Series 6000

- **Fault tolerance improves PLC communications performance**
- **Reduces down time and material waste due to PLC bus failure**
- **Low cost installation**
- **Upgrade can be performed on existing systems**
- **Fast transparent operation**
- **User selectable automatic or manual reset**
- **System maintenance during operation**
- **Supports most PLC bus types**



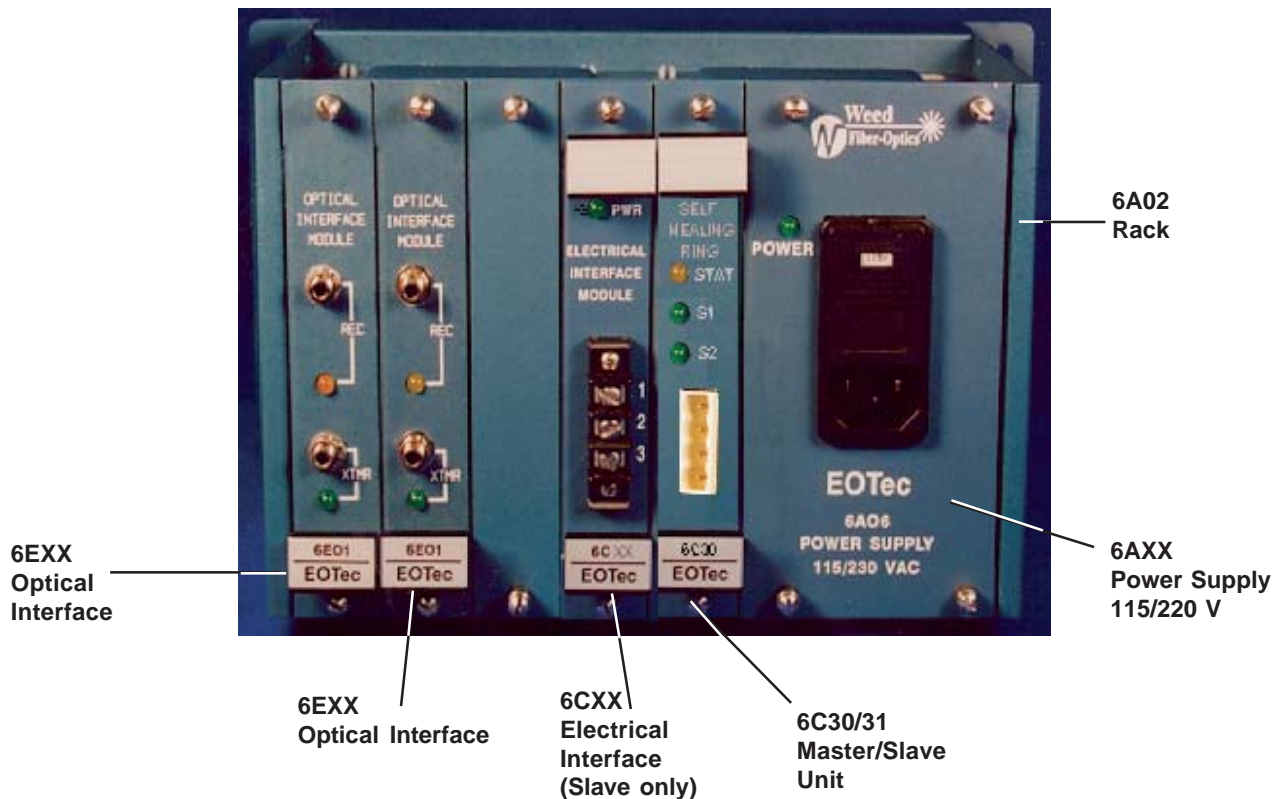
**SELF HEALING FIBER OPTIC MODEM  
OPERATION IS NOT DEPENDENT ON:  
PROTOCOL  
FIBER SIZE  
SPEED**

The EOTec Series 6000 Self-Healing Fiber Optic Modem system provides fault tolerant reliable data communications for plant automation systems. Utilizing the 6C30/6C31 Master/Slave Modules in a ring configuration provides for a modular format that is easily configurable for your specific needs. Expansion can be performed without system interruption. Status LEDs and relay-outputs are provided on the 6C30/6C31 Master/Slave Modules for quick reference.

The Series 6000 handles EMI/RFI, lightning, long distances, crosstalk and ground noise with ease in addition to providing electrical isolation in hazardous environments.

Applications include industrial process control systems requiring communications between components of the system that may span over areas hundreds to thousands of feet. Control of the processes may be extremely critical and require very high reliability communications links.

## EOTec Series 6000 Modular Self-Healing Fiber Optic Modem



The communications system topology allows data to be communicated bi-directionally between any two points on the ring. The ring prevents collisions of data arriving from opposite directions around the ring with the addition of a single 6C30 Master Unit, which is installed in an intentional break point anywhere on the ring. The 6C30 Master Unit resides in a standard Series 6000 rack (with two optical interface 6E01 cards) anywhere on the ring and does not require electrical interface to the specified bus protocol. The 6C31 Slave Units are installed in standard Series 6000 racks at every drop where an electrical interface is present.

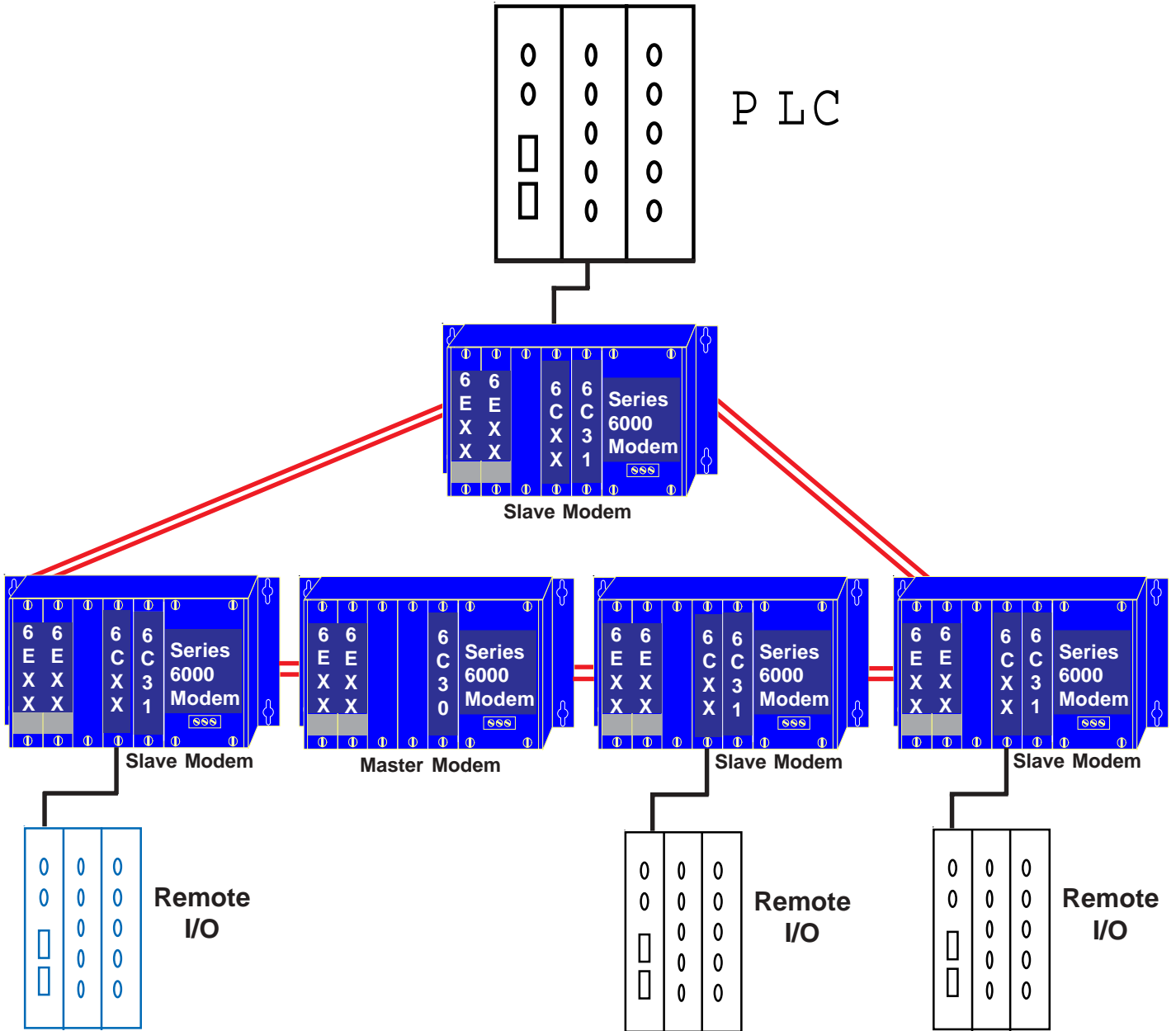
The EOTec Series 6000 Self-Healing Fiber Optic Modem system is not dependent on protocol, speed or fiber size. Self-healing is fast and automatic. After the broken ring is repaired, the original ring configuration may be restored manually via a reset button on the 6C30 or automatically. Manual or automatic reset is user selectable. A recessed button located on the 6C30 Master Unit is used to restore the original ring configuration. The reset button may be remotely located.

One Model 6CXX Electrical Interface Module is needed for each slave unit or modem rack on the fiber optic network to make the electrical connection to the PLC or I/O module.

Two Model 6E01 Optical Interface Modules are needed for each slave and master rack.

One master is required per ring. Minimum number of slave nodes per ring is two.

# Self-Healing Ring Configuration



Red ———— Fiber

Black ———— Wire

## Specifications

Part number:	6C30 Self-Healing Ring Master Module 6C31 Self-Healing Ring Slave Module
Size:	Single slot
Operational temperature range:	0 to +70 deg C (32 to 158 deg F)
Storage temperature range:	-40 to +80 deg C (-40 to 176 deg F)
Power consumption:	6 watts minimum
Indicator lights	
Power:	Green LED
Loss of optical received signal:	Red LED
Time to error indication:	<100 microseconds
Relay contacts	
(1 each, Slot 1/Slot 2 optical)	
6C30:	x 1 (closed on error)
6C31:	x 2 (closed on error)
Manual Reset	
6C30:	Remote manual reset output



Contact Esys for more information about this product:  
Esys® The Energy Control Company™  
4520 Stine Road, Ste 7  
Bakersfield, CA 93313  
(661) 833-1902

email: [esys@esys.us](mailto:esys@esys.us)  
website: <http://www.esys.us>

