

**MODEL 2073 INTERFACER PRODUCT LINE**

**IOC555**

**FIBEROPTIC / RS-422  
TRANSMIT / RECEIVE  
MODULES**



Rear view



Side view

**RS-422 Data and Clock Input/Output, Fiber (1) Input/Output**

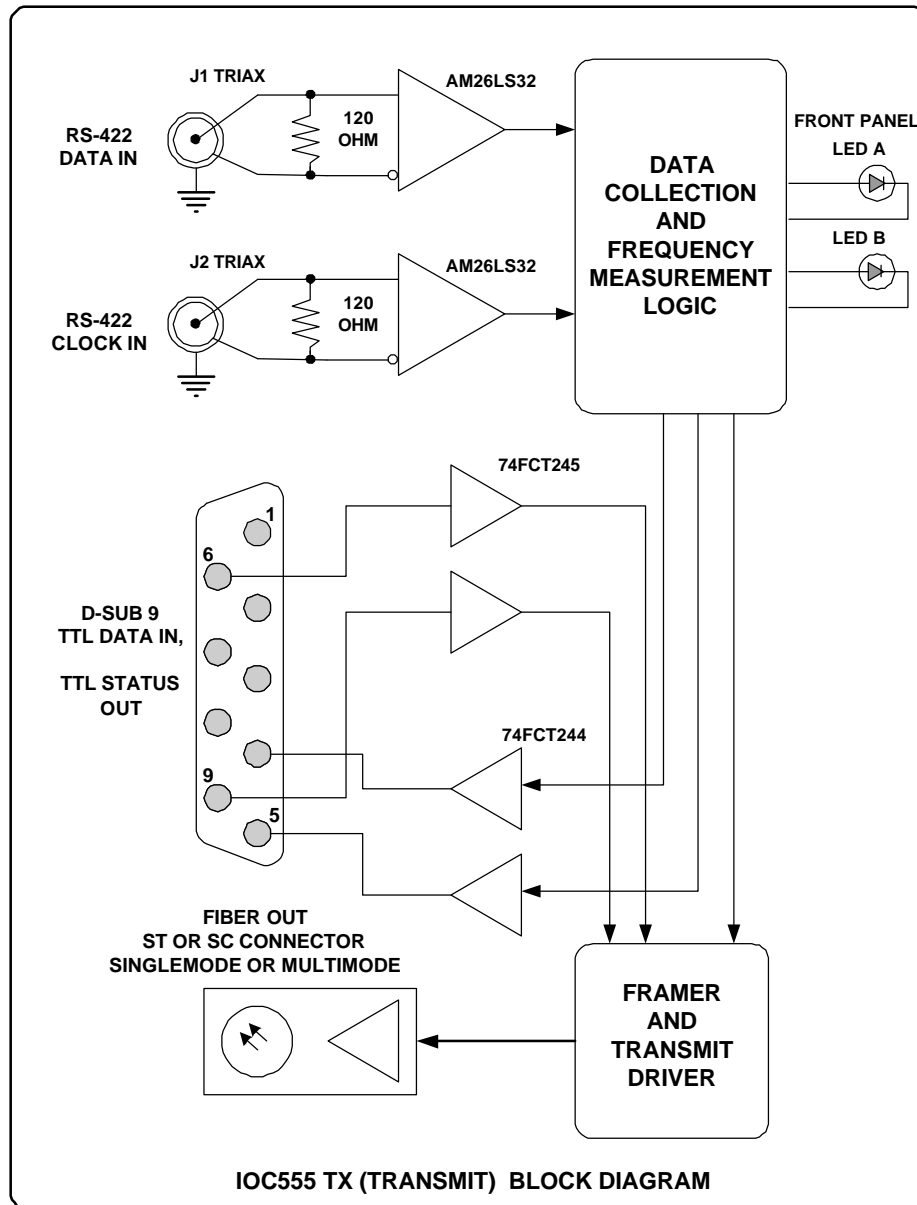
**FEATURES**

- RS-422 Differential Data and Clock Input/Output
- Single or Multimode Fiber Optic Input/Output
- 1 fiber to move both Data and Clock signals
- DC Isolated Link
- Inputs Illuminate Front Panel LEDs
- 2kbps to 35Mbps Data Rate
- Auxiliary Inputs/Outputs for status bits

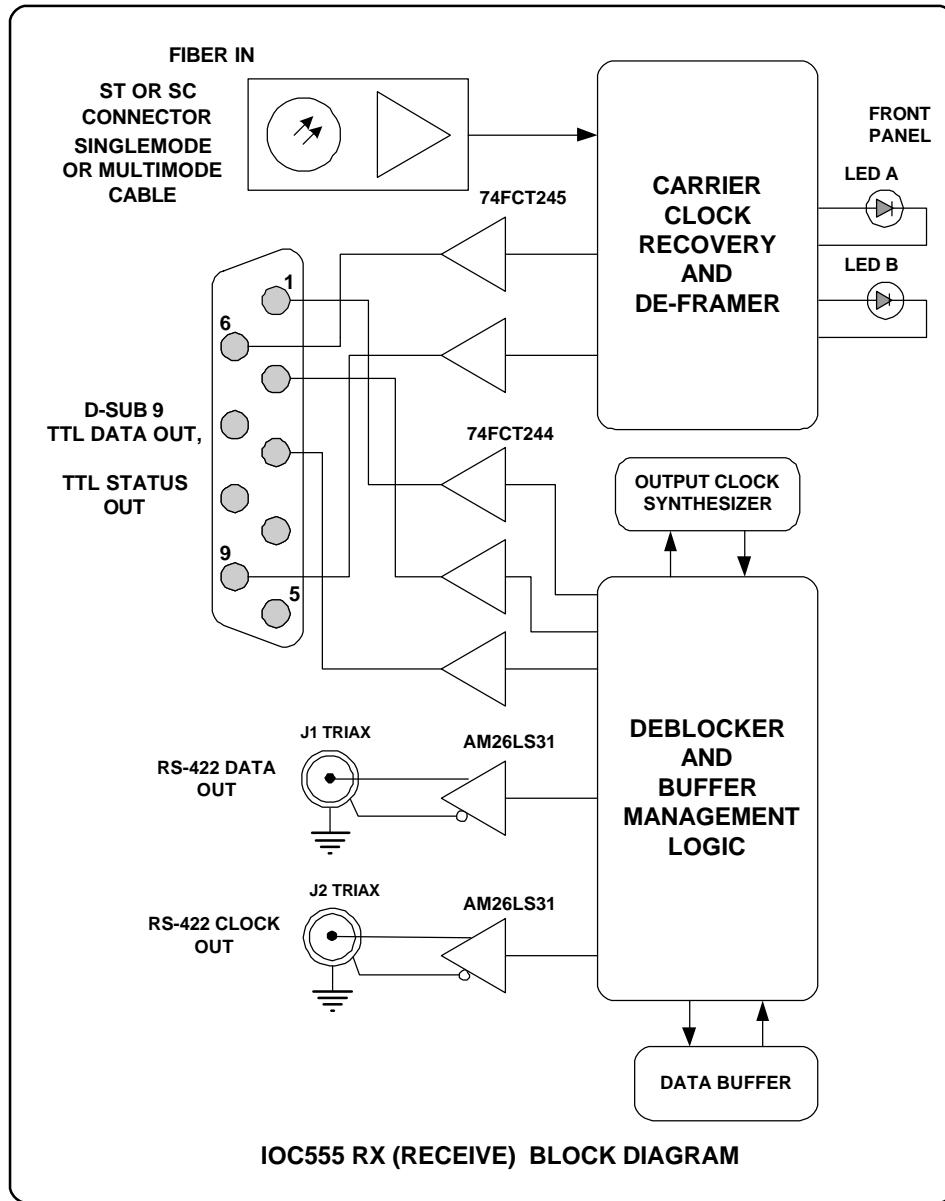
**OVERVIEW**

The IOC555 Pluggable Interface Modules (PIM) provide the ability to transfer electrical signals over optical cables. These modules are used to provide a DC isolated data link, provide a medium length (up to a few miles) data path and reduce radiated emissions. The transmitter accepts a serial synchronous data stream (data and clock) and converts it to an optical signal for transmission over either single mode or multimode fiber. The packetized data is received by the receiver module, which converts the optical signal back to its original RS-422 data and clock form. Auxiliary I/O for TTL level signals is available, via DB9 connector, for status bits such as bit sync lock indicator, alarms, etc. The IOC555 uses industry standard SMA or TRIAX, and SC or ST connectors, operates from 2kbps to 35Mbps and requires 2 of the 14 available slots in the 2073 chassis.

BLOCK DIAGRAM(S)



TX Module D-9 Pinout:	
PIN	NAME
1	NOT USED
2	NOT USED
3	NOT USED
4	TX DATA
5	TX CLK
6	AUX 1
7	GND TP
8	VCC TP
9	AUX2



RX Module D-9 Pinout	
PIN	NAME
1	RX DATA
2	RX CLOCK
3	SIGNAL DETECT
4	NOT USED
5	NOT USED
6	AUX 1
7	GND TP
8	VCC TP
9	AUX2

**SPECIFICATIONS**

**GENERAL**

SMA or TRIAX connectors  
ST or SC Fiber connectors  
2 Slot Module (3" x 6" x 1.8")  
Single or Multimode fiber  
Model 2073 Pluggable Interface Module

**ELECTRICAL SIGNAL INPUT**

RS-422  
120ohm line-to-line termination

**ELECTRICAL SIGNAL OUTPUT**

RS-422  
High current

**OPTICAL SIGNAL I/O**

ST or SC type Connectors  
Single or Multimode  
1300 nm Wave length

**APPLICATION INFORMATION**

The IOC555 is used to distribute data across long lengths (3 miles) of fiber cable. It utilizes industry standards for both the electrical and optical signal interfaces. The units are self adjusting to any data rate within its specified range requiring no operator setup.

This module can also be plugged into Apogee Models:

- 2097 and 2098: *Data Acquisition Mux/Demux*
- 6801: *5 Channel BERT Operation*
- 6804: *Multi Channel Clock Recovery*