

### **MIC-530T/35C and MIC-35T/530C**

For converting between **RS-530** and **V.35** interfaces. MIC-530T/35C is used for connecting an RS-530 DTE to a V.35 DCE. MIC-35T/530C is used for connecting an RS-530 DCE to a V.35 DTE.

### **MIC-35T/36C and MIC-36T/35C**

For converting between **V.35** and **V.36/V.11 (RS-449/422)** interfaces. MIC-35T/36C is used for connecting a V.35 DTE to a V.36 (RS-449/422) DCE. MIC-36T/35C is used for connecting a V.35 DCE to a V.36 DTE.

Specifications are subject to change without prior notice.



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## *MIC-Series*



### *Miniature Interface Converters*

*RS-232/V.24*

*V.35*

*V.36/V.11*

*RS-449/RS-422*

*RS-530/RS-422*

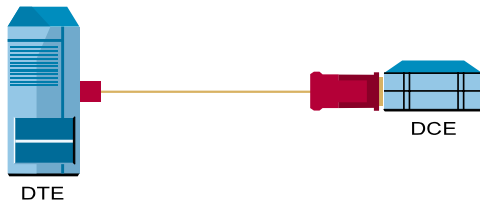
*X.21*



## FEATURES

- Conversion between V.24/RS-232, V.35, V.36, RS-449/422, RS-530/422 and X.21 interfaces
- Equipped with cable and connectors
- Transparent to protocol
- High speed, up to 2 Mbps (for most models)
- Immediate installation
- No AC power required (for most models)
- Compact and lightweight

## APPLICATION



## DESCRIPTION

- The MIC Series is a family of interface converters enabling connection between the DTE and DCE with different interfaces (see *Table 1*). MIC models operate in synchronous applications at data rates up to 2048 kbps with balanced interface at both ends, or at data rates up to 200 kbps with V.24/RS-232 at one end.
- MICs perform both the physical conversion and the electrical conversion between the two interfaces. The circuitry is designed to provide *short range* interface conversion, i.e., for connection of devices which are co-located.
- Most MIC models operate without AC power, using ultra-low power from the DTE and DCE data and control signals.
- The various devices of the MIC series are described in the following paragraphs.

### MIC-24/35

For converting between **V.24/RS-232** and **V.35** interfaces. MIC-24/35 is switch-selectable and is used either for connecting a V.24/RS-232 DTE to a V.35 DCE, or for connecting a V.24 DCE to a V.35 DTE.

### MIC-24/36

For converting between **V.24/RS-232** and **V.36/RS-422** interfaces. MIC-24/36 is switch-selectable and is used either for connecting a V.24/RS-232 DTE to a V.36/RS-422 DCE, or for connecting a V.24 DCE to a V.36 DTE.

### MIC-232/530

For converting between **V.24/RS-232** and **RS-530** interfaces. MIC-232/530 is switch-selectable and is used either for connecting a V.24/RS-232 DTE to an RS-530 DCE, or for connecting a V.24/RS-232 DCE to an RS-530 DTE.

### MIC-24T/21C and MIC-21T/24C

For converting between **V.24/RS-232** and **X.21** interfaces. MIC-24T/21C is used for connecting a V.24/RS-232 DTE to an X.21 DCE. MIC-21T/24C is used for connecting a V.24 DCE to an X.21 DTE, and has a built-in buffer to accommodate phase differences between the receive and transmit clocks of the DCE.

### MIC-24/11 (data only)

For converting between **V.24/RS-232** and **V.11/RS-422** interfaces. MIC-24/11 is switch-selectable and is used for connecting a V.24/RS-232 DTE to a V.11/RS-422 DCE, or a V.24 DCE to a V.11 DTE. This model converts only data signals, and *not* control signals, and is suitable only for asynchronous applications.

### MIC-35T/21C and MIC-21T/35C

For converting between **V.35** and **X.21** interfaces. MIC-35T/21C is used for connecting a V.35 DTE to an X.21 DCE. MIC-21T/35C is used for connecting a V.35 DCE to an X.21 DTE, and has a built-in buffer to accommodate phase differences between the receive and transmit clocks of the DCE. MIC-21T/35C requires an external power supply.

**CBL-36T/21C**

For converting between **RS-449/422 (V.36/V.11)** and **X.21** interfaces. The CBL-36T/21C cable is used for connecting a V.36 (RS-449/422) DTE to an X.21 DCE. This model is only a cable for performing cross-wiring between the two interfaces.

**CBL-530T/21C and MIC-21T/530C**

For converting between **RS-530** and **X.21** interfaces. The CBL-530T/21C cable is used for connecting an RS-530/422 DTE to an X.21 DCE. This model is only a cable for performing the cross-wiring between the two interfaces. MIC-21T/530C is used for connecting an RS-530 DCE to an X.21 DTE, and has a built-in buffer to accommodate phase differences between the receive and transmit clocks of the DCE. MIC-21T/530C requires an external power supply.

**CBL-530/449**

For converting **RS-530** to **RS-449/422 (V.36/V.11)** interfaces. CBL-530/449 is used for connecting an RS-530 DTE or DCE to an RS-449/422 (V.36) DCE or DTE. This model is only a cable for performing cross-wiring between the two interfaces.

## SPECIFICATIONS

- **Data Rates**

Up to 200 kbps for all models with the V.24/RS-232 interface  
Up to 2048 kbps for all other models

- **Transmission Format**

MIC-24/11: Asynchronous  
All other models: Synchronous, transparent to protocol

- **Environment**

Temperature: 0-50°C / 32-122°F  
Humidity: Up to 90%, non-condensing

- **Interface Connectors**

See *Ordering*

- **Cables**

CBL-530/449, CBL-36T/21C and CBL-530T/21C: 30 cm (1 ft)  
MIC-24/11: No cable provided  
All other models: 2m (6.5 ft)

- **Power Supply**

MIC-21T/35C and MIC 21T/530C: Require connection to an external power supply, providing 9 VDC @ 300 mA  
All other models: No AC power required

- **Physical**

Length: 100 mm / 3.9 in  
Width: 53 mm / 2.1 in  
Height: 22 mm / 0.9 in  
Weight: 300 g / 10.5 oz  
(including cable and connector)

**Table 1. MIC Series Interface Converters**

	<b>V.24/RS-232</b> 25-pin	<b>V.35</b> 34-pin	<b>V.36/RS-449</b> 37-pin	<b>X.21</b> 15-pin	<b>RS-530</b> 25-pin
<b>V.24/RS-232</b> 25-pin		MIC-24/35	MIC-24/36	MIC-24T/21C	MIC-232/530
<b>V.35</b> 34-pin	MIC-24/35		MIC-35T/36C	MIC-35T/21C	MIC-35T/530C
<b>V.36/RS-449</b> 37-pin	MIC-24/36	MIC-36T/35C		CBL-36T/21C	CBL-530/449
<b>X.21</b> 15-pin	MIC-21T/24C	MIC-21T/35C			MIC-21T/530C
<b>RS-530</b> 25-pin	MIC-232/530	MIC-530T/35C	CBL-530/449	CBL-530T/21C	

## ORDERING

Model Name	DTE	DCE	Connector 1 (DTE)	Connector 2 (DCE)	Power Supply
MIC-24/11/*		Selectable	25-pin male/female	Terminal Block	
MIC-24/35/*		Selectable	25-pin male	34-pin male/female	
MIC-24/36/*		Selectable	25-pin male	37-pin male/female	
MIC-232/530/*		Selectable	25-pin male	25-pin male/female	
MIC-24T/21C	V.24/RS-232	X.21	25-pin male	15-pin male	
MIC-21T/24C/#	X.21	V.24/RS-232	15-pin female/male	25-pin male	
MIC-35T*/21C	V.35	X.21	34-pin male/female	15-pin male	
MIC-21T/35C/*	X.21	V.35	15-pin female	34-pin male/female	+
CBL-36T/21C	V.36/RS-422	X.21	37-pin female	15-pin male	
CBL-530T/21C/*	RS-530	X.21	25-pin female	15-pin male/female	
MIC-21T/530C	X.21	RS-530	15-pin female	25-pin male	+
CBL-530/449/*		Bidirectional	25-pin male	37-pin male/female	
MIC-530T/35C/*	RS-530	V.35	25-pin female	34-pin male	
MIC-35T*/530C	V.35	RS-530	34-pin male/female	25-pin male	
MIC-35T*/36C	V.35	V.36/RS-422	34-pin male/female	37-pin male	
MIC-36T/35C/#	V.36/RS-422	V.35	37-pin female/male	34-pin male	

# **Specify:**

**M-M** for both male connectors

\* **Specify:**

**F** for female connector

**M** for male connector

Note: This options refer only to those connectors where the table above specifies "male/female".

Default is male connector.

+ **P/S-AC/9/500**

90 to 264 VAC external power supply  
(Should be ordered separately)