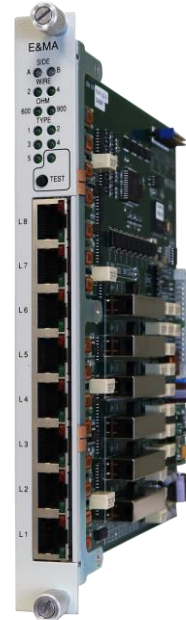




# 8-channel 2W/4W E&M Voice Card (8EMA) for Loop-AM3440

## Features

- Eight RJ45 connectors or one Telco 64 connector for E&M
- Supports E&M signaling over Type 1, Type 2, Type 3, Type 4 and Type 5
- Programmable gain setting per-port
- A side and B side supported  
(A side is exchange side, B side is carrier side)
- 2 wire, 4 wire supported
- Transmit only (TO) type supported
- A-law or  $\mu$ -law coding
- Provides  $\pm 24$ ,  $\pm 48$  or  $\pm 125$ Vdc powered manufacture options



## Description

Loop Telecom's E&MA plug-in card is designed for the Loop-AM3440 device. It allows 8 ports E&M interfaces to be multiplexed to 64 kbps DS0 signals. It can also be used as TO (Transmit Only). Voice coding can be selected as either A-law or  $\mu$ -law. Manufacture options are available to use on AM3440 system with  $\pm 24$ ,  $\pm 48$  or  $\pm 125$ Vdc power input.

## Ordering Information

To specify options, choose from list below:

**Note:** RoHS compliant units are identified by the letter **G** appearing at the end of the ordering code.

Model	Description	Notes
Loop-AM3440-8EMA-x-pt- <b>typ-G</b>	8-channel 2W/4W E&MA plug-in card	<b>pt</b> = power type For <b>x</b> , <b>pt</b> and <b>typ</b> options, please refer to the table below for detail information

■ Where **x** is used to select signaling bits type and special functions:

x =	Description	Notes
<b>E</b>	Follows ETSI signaling bits	Jumper selectable for all channels
<b>A</b>	Follows ANSI signaling bits	
<b>R</b>	Reverse for ON-HOOK and OFF-HOOK signaling bits exchange	
<b>AR</b>	Follows ANSI signaling bits and reverse bit	
<b>S</b>	Follows customer's special bit or function assignment	
<b>S4</b>	Disable the function of the test button	
<b>S5</b>	Forcing all ports to be OFF-HOOK when an alarm occurs	
<b>S6</b>	Forcing all ports to be ON-HOOK when an alarm occurs	

- Where **pt** is used to select the following functions:

<b>pt=</b>	<b>Description</b>	<b>Notes</b>
<b>24</b>	For AM3440-A type chassis using SDA power module with $\pm 24$ Vdc input power	
<b>PWR</b>	For AM3440-A type chassis using SDA power module with $\pm 48$ Vdc input power, or AM3440-A type chassis using SD125 power module with $\pm 125$ Vdc input power, or AM3440-B/C type chassis using SDB power module with $\pm 48$ Vdc input power, or AM3440-B/C type chassis using SAB power module with 100 to 240Vdc input power	
<b>PWRIE1613</b>	For AM3440-A type chassis using SDA power module with $\pm 48$ Vdc input power, compiled with IEEE1613 standard For AM3440-C type chassis using SDA power module with $\pm 48$ Vdc input power, compiled with IEEE1613 standard	

- Where **typ** is used to select the connector type:

<b>typ=</b>	<b>Description</b>	<b>Note</b>
<b>RJ</b>	8 x RJ45	
<b>TELCO*</b>	1 x Telco 64	

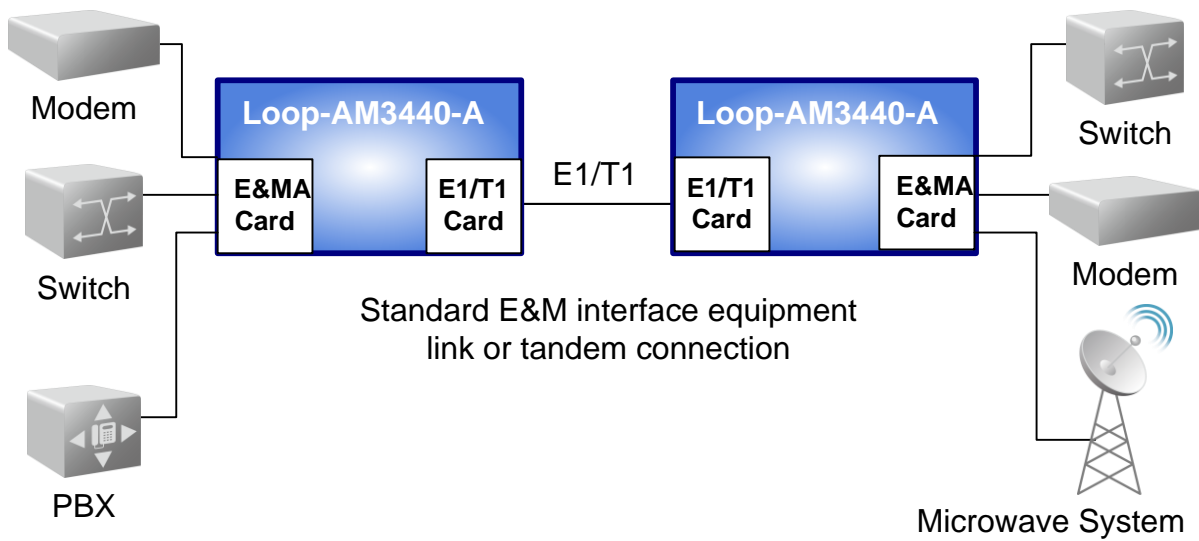
\*Future Option

## Product Specification for E&MA Interface Card

Connector	Eight RJ45 or one Telco 64
Alarm Conditioning	CGA busy after 2.5 seconds of LOS, LOF
Encoding	A-law or $\mu$ -law, user selectable together for all
Impedance	Balanced 600 or 900 ohms
Gain Adjustment (Per-port setting)	-16 to +7 dB / 0.1dB step for transmit (D/A) gain -16 to +14 dB / 0.1dB step for receive (A/D) gain
I/O Power Range	A/D Analog input level: -66 dBm (0.00039 Vrms) ~ + 3 dBm (1.09 Vrms) D/A Analog output level: -66 dBm (0.00039 Vrms) ~ + 4 dBm (1.22 Vrms)
Gain Variation	$\pm 0.5$ dB at 0 dBm0 input
Frequency Response	$\pm 0.5$ dB from 300 to 3400 Hz, coincide with ITU-T G.712
Longitudinal Conversion Loss	> 46dB
Total Distortion	> 35 dB at 0 dBm0 input
Idle Channel Noise	Max. -65 dBm0p
Carrier Connection	Side A ( exchange side) and Side B (carrier side) setup by side switch
Wire Mode	2 wire and 4 wire (programmable)
Signaling	Type 1, Type 2, Type 3, Type 4, and Type 5, Transmit only (programmable)
Modems	Full compatibility with V.90 modems
Output Power on E/M leads	-48Vdc

All in-band signaling tones are carried transparently by the digitizing process.  
Customer is responsible for in-band signaling compatibility between a telephone and a switch, or between a PBX and a switch.

## Application Illustration



[www.looptelecom.com](http://www.looptelecom.com)

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