



12FXS/12FXO Voice Card for Loop-AM3440

Features:

- 12 telephone connections for FXS
- 12 central office or PBX line connections for FXO
- PLAR supported
- Loop start or Loop start/ground start option
- Battery reverse supported
- DID supported
- 12KHz and 16KHz metering pulse option.
- A, B, C, D signaling bit software programmable
- law or μ -law coding
- Most signaling conventions supported
- Multi-color LED indicators for each port
- Intended for use with -48Vdc powered main units



Description

The 12FXS/12FXO plug-in cards are designed for the single slot of Loop-AM3440 series. It allows voice frequency interfaces to be multiplexed as a 64 Kbps DS0 signal onto a digital network. 12 FXS provides 12 voice Interfaces connect to telephones. 12FXO provides connections from telephone lines, either from a central office or from a PBX in RJ11X12 connector.

Coding is either A-law or μ -law selectable by user. Most popular signaling conventions are supported, including PLAR.

Ordering Information

To specify options, choose from the list below.

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

Model (non RoHS compliant)	Model (RoHS compliant)	Description	Note
Loop-AM3440-12FXS-sn-pt	Loop-AM3440-12FXS-sn-pt-G	12-channel FXS plug-in card with 600/900 Impedance, Battery Reverse, Loop Start and PLAR. Without Ground Start and Metering Pulse. Used with 12 RJ11.	12FXS-GMP includes all FXS card functions For sn option, please refer to the table below for detail information
Loop-AM3440-12FXS-P-sn-pt	Loop-AM3440-12FXS-P-sn-pt-G	12-channel FXS plug-in card with 600/900 Impedance, Battery Reverse, Loop Start, PLAR and [PLAR bit programmable]. Without Ground Start and Metering Pulse. Used with 12 RJ11.	pt = power type. For pt option, please refer to the table below for detail information The IEEE1613 standard applies to AM3440-CHA only
Loop-AM3440-12FXS-M-pt	Loop-AM3440-12FXS-M-pt-G	12-channel FXS plug-in card with 600/900 Impedance, Battery Reverse, Loop Start, PLAR and [Metering Pulse]. Used with 12 RJ11.	

Loop-AM3440-12FXS-MPP- pt	Loop-AM3440-12FXS-MPP- pt-G	12-channel FXS plug-in card with 600/900 Impedance, Battery Reverse, Loop Start, PLAR, [PLAR bit programmable] and [Metering Pulse]. Used with 12 RJ11.	
Loop-AM3440-12FXS-GS- pt	Loop-AM3440-12FXS-GS- pt-G	12-channel FXS plug-in card with 600/900 Impedance, Battery Reverse, Loop Start, PLAR and [Ground Start]. Used with 12 RJ11.	
Loop-AM3440-12FXS-GM- sn-pt	Loop-AM3440-12FXS-GM- sn-pt-G	12-channel FXS plug-in card with 600/900 Impedance, Battery Reverse, Loop Start, PLAR, [Ground Start] and [Metering Pulse]. Used with 12 RJ11.	
Loop-AM3440-12FXS-GMP- pt	Loop-AM3440-12FXS-GMP- pt-G	12-channel FXS plug-in card with 600/900 Impedance, Battery Reverse, Loop Start, PLAR, [PLAR bit programmable], [Ground Start] and [Metering Pulse]. Used with 12 RJ11.	
Loop-AM3440-12FXO	Loop-AM3440-12FXO- G	12-channel FXO plug-in card with 600/900 Impedance, Battery Reverse and Loop Start. Without Ground Start and Metering Pulse. Used with 12 RJ11.	12FXO-GM includes all FXO card functions
Loop-AM3440-12FXO-M	Loop-AM3440-12FXO-M- G	12-channel FXO plug-in card with 600/900 Impedance, Battery Reverse, Loop Start and [Metering Pulse]. Used with 12 RJ11.	
Loop-AM3440-12FXO-GS	Loop-AM3440-12FXO-GS- G	12-channel FXO plug-in card with 600/900 Impedance, Battery Reverse, Loop Start and [Ground Start]. Used with 12 RJ11.	
Loop-AM3440-12FXO-GM	Loop-AM3440-12FXO-GM- G	12-channel FXO plug-in card with 600/900 Impedance, Battery Reverse, Loop Start, [Ground Start] and [Metering Pulse]. Used with 12 RJ11.	

■ Where **sn** is used to select special function. If this option is not required, omit the **sn** field in the ordering code.

sn =	Description	Note
S1	FXS Loop Feed = -48 Vdc with 35 mA current limit	
S4	Remove alarm tone	
S5	Double ring tone transmit	

Note: For sn (special function), please contact your nearest Loop sales representative.

■ Where **pt** is used to select the following functions.

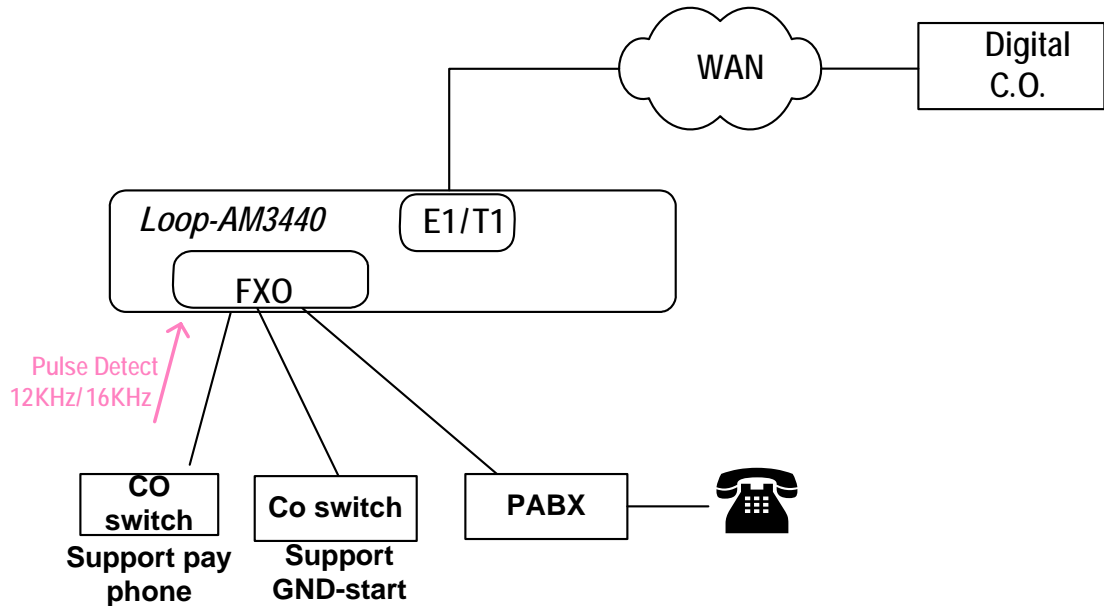
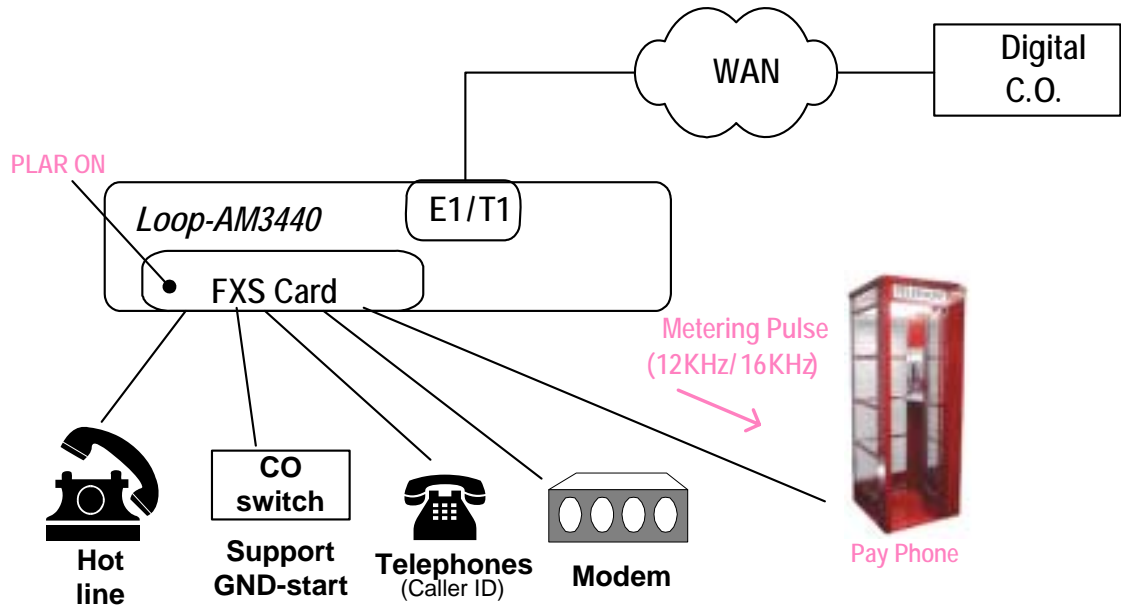
pt=	Description	Note
PWR	complied with -48 Vdc(SD, S5, SDB), -125Vdc(SD125) and AC (SAB) power modules	
PWRIE1613	complied with IEEE1613 standard, and with -48 Vdc(S5) power module	For AM3440-CHA only
24	complied used with -24 Vdc(S524) power module	

12FXS/FXO Product Specifications

Voice Card (12FXS,12FXO)

12 FXS/FXO Connector	Twelve RJ11
Alarm Conditioning	CGA busy after 2.5 seconds of LOS, LOF
Encoding	A-law or μ -law, user selectable together for all
AC Impedance	Balanced 600 or 900 ohms (selectable together for all)
Longitudinal Conversion Loss	> 46dB
Cross talk measure	Max -70dBm0
Gain Adjustment	-21 to +10 dB / 0.1dB step transmit & receive
Signal/ Distortion	> 25dB with 1004 Hz, 0dBm input
Frequency Response	- 0.25 to -1 dB from 300 to 3400 Hz, coincide with ITU-T G.712
Idle Channel Noise	Max. -65 dBm0p
Variation of Gain	\pm 0.5dB
FXO	Ringing REN 0.5B (AC)
	Detectable Ringing 25 Vrms
	Loop Resistance \leq 1800 Ω
	DC Impedance (ON-HOOK) > 1M Ω
	DC Impedance (OFF-HOOK) 235 Ω @ 25mA feed
	90 Ω @ 100mA feed
FXS Loop Feed	-48Vdc or -24Vdc with 25mA current limit per port
	Jumper Selectable: 25mA, 30mA, 35mA
FXS signalling	Normal / Automatic Ring down
FXS Ringing	1 REN at 5K meters per port
	16.7Hz, 20Hz, 25Hz, 50Hz, user selectable for all ports
	38 to 85 Vrms (sine wave), 76 Vrms for default Ring Voltage
	2 sec on 4 sec off, or 1 sec on 2 sec off optional for PLAR
Signaling	Loop Start, DTMF, pulse, PLAR, Battery Reverse
Optional Signaling (for special order)	Ground Start, Metering pulse (12 KHz, 16 KHz), and P(in PLAR mode, PLAR signalling bits are programmable.
Signaling Bit A,B,C,D	Programable bit
	<ul style="list-style-type: none">• 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.• -24Vdc power is for FXS PCB version L and up

Application Illustrations



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