

LINE ISOLATOR / ODX DRIVER TYPE LI-4302

DATA SHEET

GENERAL

The LI-4302 Line Isolation Unit is a two wire dial through unit designed for use in conjunction with Customer Premises Equipment which is not capable of meeting the ACMA requirements for line isolation and electrical safety.

The LI -4302 provides the appropriate isolation standards and allows connection to the PSTN of otherwise non permitted equipment (subject to the approval of the ACMA for the combined LI-4302 and terminal equipment).

The LI-4302 can also be used as an **Outdoor Extension (ODX) Driver** for PABX and Key Telephone Systems (up to 4.2 km of 0.4 mm / 7 km of 0.63 mm twisted copper pair). The LI-4302 regenerates the ringing signal and line feed (on the RJ12 socket, centre pair, marked 'EQUIP') to the remote equipment to meet the specifications below.

FEATURES

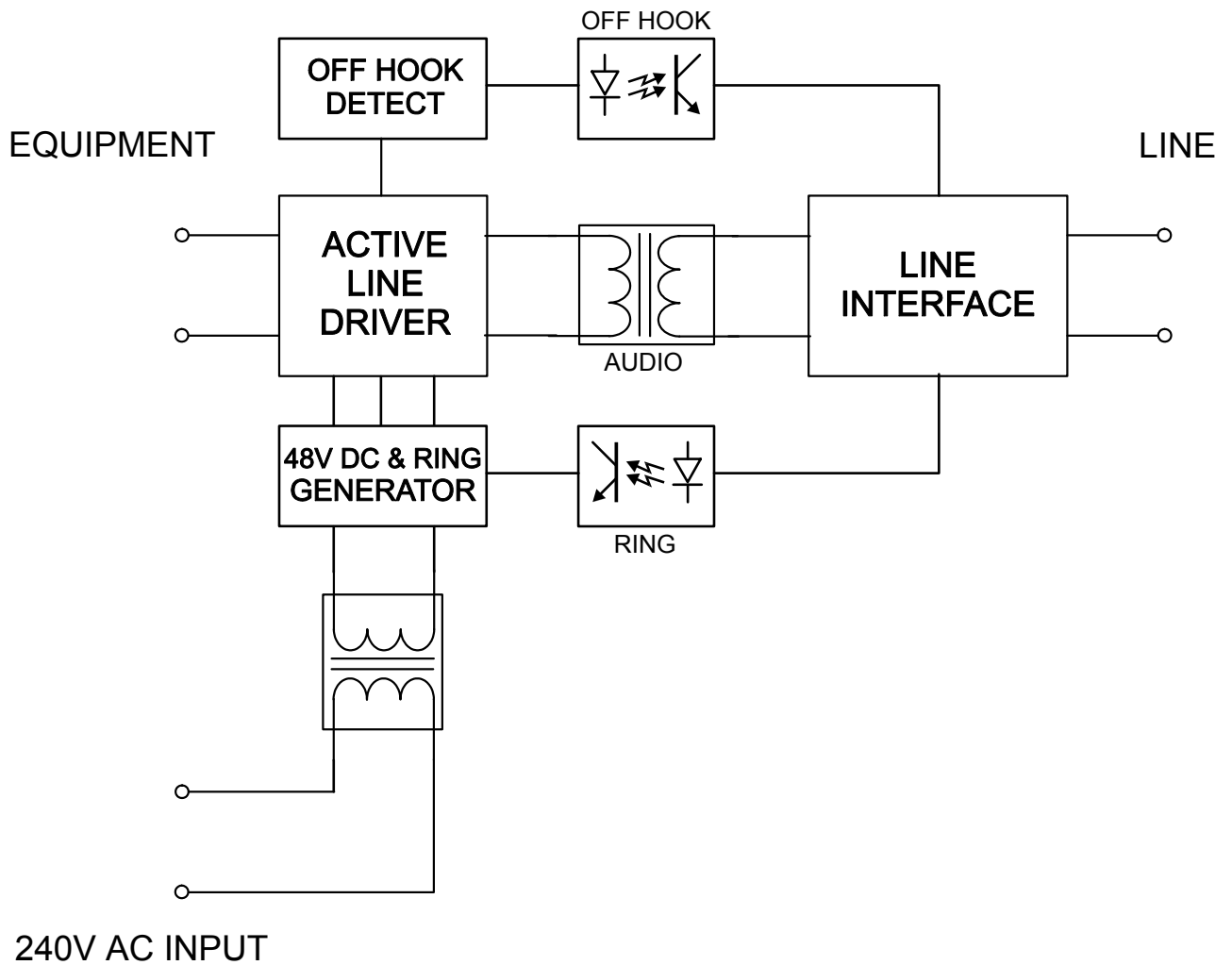
1. Provides the necessary 3.5 kV a.c. isolation for more than one minute.
2. Provides 5 kV d.c. isolation for more than one minute.
3. Provides 42 - 48 V d.c. nominal line feed to the equipment.
4. Accepts ring voltage on the line side and regenerates ring voltage to the equipment
5. Detects off hook condition and loops the line.
6. Accepts decadic dialing from the equipment and transmits decadic dialing to line.
7. Is capable of transmitting signals across the voice frequency spectrum in both directions including DTMF signals.

The LI-4302 is available as a single stand-alone unit that comes fully equipped with power cord, telephone cord with a 605 plug attached (other plugs to order) and an RJ 12 modular telephone socket on the equipment side. Rack mount and multiple port configurations are also available.

SPECIFICATIONS

Isolation	> 3.5 kV a.c., > 5 kV d.c.
Insertion loss	< 2 dB
Return loss (Terminated at customer end with AUSTEL Reference Impedance (220Ω + (820Ω//120nF))	> 20 dB at 300 Hz > 30 dB from 600 Hz to 3400 Hz
Seizure, hold and pulse dialing current	Complies with AUSTEL Specification TS 002
Pulse dialing response	< 150 micro seconds
Ring detect threshold	20V RMS @ $\geq 16 \frac{2}{3}$ Hz
Ring output	60V a.c. RMS. @ 50 Hz superimposed on 42V d.c., at nominal mains (minimum 20 V zero crossing)
Ring transfer response	< 50 milliseconds
Line seizure & decadic dialing detect current	≥ 12 mA (pick up detected at ≤ 2.5 kΩ across the line but not at ≥ 10 kΩ d.c. loop resistance)
Output Equivalent Circuit	42 V in series with 900 Ω, current limited to 40 mA, at nominal mains
Mains input	240 V a.c. 50/60 Hz. (other voltages to order)
Power Consumption	20 mA \approx 5 VA maximum.
Mains cord length	1.7 meters
AUSTEL Certified Component Listing No.	A95/TI/0215
ACMA Supplier's Code	N468
ERAC Responsible Supplier No.	E1287
Dimensions (single port)	W 110 mm x H 52 mm x D 85 mm
Ordering Code	LI-4302 (SY-4781)

BLOCK DIAGRAM



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