

# TEST SITE HARDWARE LISN/PLISN



**Model 3810/2 LISN**



**Model 3816/2 LISN**

**ETS-Lindgren's 3810/2 and 3816/2 LISNs** are multi-line low pass filter networks used for conducted emissions measurement. They are placed between the power mains and the Equipment Under Test (EUT) to stabilize line impedance, provide a 50 Ω RF connection, and eliminate unwanted RF signals from the line supply. In addition, LISNs can be used to predict radiated emissions for diagnostic and pre-compliance testing.

The Model 3810/2 is designed and tested in accordance with IEC Publication 1010, further indication of ETS-Lindgren's commitment to safety.

Both LISN models cover the 9 kHz to 30 MHz frequency range and are designed to be used with a signal analyzer for making FCC 15, VDE 0871, VDE 0875, and EN 55022 conformance measurements.

### Earth Line Choke

An Earth Line Choke is included on the Model 3810/2 and Model 3816/2. The choke isolates the EUT from RF ground while maintaining a safety ground.

### Standard Configuration

- LISN Assembly
- Individually calibrated per ANSI C63.4. Actual insertion loss and impedance data and a signed Certificate of Calibration included in manual.

### Artificial Hand

An Artificial Hand circuit which conforms to EN55014 is included on both the 3810/2 and the 3816/2 LISNs. The circuit is useful for testing hand-held equipment which does not have a connection to protective earth ground.

### High Pass Filter

A switchable high pass filter is included on the Model 3816/2, preventing potential overload to the analyzer and eliminating the need to apply correction factors to measurements.

### Choice of Plugs/Receptacles

Both models are available with either NEMA®, SCHUKO®, or British power out connectors.

### Manual and Remote Switched Test Ports

Manual line switching is provided on the Model 3810/2, while both manual and remote switching are included on the 3816/2. In the remote switching mode, the selected line (A or B) is terminated at 50 Ω load when power has not been applied to the mains, permitting measurement of the noise floor.

### Options

- MP4 Cord Loom provides a repeatable method for looping excess cord in serpentine fashion, per MP4.

## MODELS 3810/2, 3816/2

- 9 kHz to 30 MHz Frequency Range
- 10 A or 16 A Continuous Current Rating
- Earth Line Choke
- Artificial Hand Network
- High Pass Filter
- Choice of Plugs/Receptacles
- Manual or Remote Switched Test Ports

## Applications

### 3810/2 and 3816/2 Series

FCC-15	CE
VDE 0871	CE
VDE 0875	CE
EN55022	CE

## Operational Features

### 3810/2 Series

Manual Switched Earth Line Choke	Yes
Artificial Hand	Yes
Manual Switched High Pass Filter	No
Manual Switched Test Ports	Yes
Remote Switched Test Ports	No

### 3816/2 Series

Manual Switched Earth Line Choke	Yes
Artificial Hand	Yes
Manual Switched High Pass Filter	Yes
Manual Switched Test Ports	Yes
Remote Switched Test Ports	Yes

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## Technical Specifications

### Electrical (3810/2-NM)

Power Out Connector	NEMA
Lines Plus Ground	2
Frequency Range	9 kHz to 30 MHz
Power Source Frequency	60 Hz
Maximum Current	10 A
Maximum Voltage	125 VAC Line to Ground
Network Inductance Impedance	50 $\mu$ H/250 $\mu$ H, 50 $\Omega$
Power In Connector	IEC Power Inlet with Customer Specified Cordset

### Electrical (3810/2-SH)

Power Out Connector	SCHUKO
Lines Plus Ground	2
Frequency Range	9 kHz to 30 MHz
Power Source Frequency	50 Hz
Maximum Current	10 A
Maximum Voltage	250 VAC Line to Ground
Network Inductance Impedance	50 $\mu$ H/250 $\mu$ H, 50 $\Omega$
Power In Connector	IEC Power Inlet with Customer Specified Cordset

### Electrical (3810/2-BS)

Power Out Connector	British
Lines Plus Ground	2
Frequency Range	9 kHz to 30 MHz
Power Source Frequency	50 Hz
Maximum Current	10 A
Maximum Voltage	250 VAC Line to Ground
Network Inductance Impedance	50 $\mu$ H/250 $\mu$ H, 50 $\Omega$
Power In Connector	IEC Power Inlet with Customer Specified Cordset

### Physical (3810/2 Series)

Width	22.2 cm
	8.7 in
Depth	38.1 cm
	15.0 in
Height	15.2 cm
	6.0 in
Weight	4.9 kg
	10.7 lb

# TEST SITE HARDWARE LISN/PLISN

## Technical Specifications

### Electrical (3816/2-NM)

Power Out Connector	NEMA
Lines Plus Ground	2
Frequency Range	9 kHz to 30 MHz
Power Source Frequency	60 Hz
Maximum Current	16 A
Maximum Voltage	125 VAC Line to Ground
Network Inductance Impedance	50 $\mu$ H/250 $\mu$ H, 50 $\Omega$
Power In Connector	Customer Specified Plug

### Electrical (3816/2-SH)

Power Out Connector	SCHUKO
Lines Plus Ground	2
Frequency Range	9 kHz to 30 MHz
Power Source Frequency	50 Hz
Maximum Current	16 A
Maximum Voltage	250 VAC Line to Ground
Network Inductance Impedance	50 $\mu$ H/250 $\mu$ H, 50 $\Omega$
Power In Connector	Customer Specified Plug

### Electrical (3816/2-BS)

Power Out Connector	British
Lines Plus Ground	2
Frequency Range	9 kHz to 30 MHz
Power Source Frequency	50 Hz
Maximum Current	16 A
Maximum Voltage	250 VAC Line to Ground
Network Inductance Impedance	50 $\mu$ H/250 $\mu$ H, 50 $\Omega$
Power In Connector	Customer Specified Plug

### Physical (3816/2 Series)

Width	22.2 cm
	8.7 in
Depth	38.1 cm
	15.0 in
Height	15.2 cm
	6.0 in
Weight	4.9 kg
	10.7 lb