7949

IMP161 - 16Arms Single Phase
IMP163 - 16Arms Three Phase
IMP323 - 32Arms Three Phase
IMP753 - 75Arms Three Phase

N4L Impedance Networks

Fully Compliant to IEC61000-3-3 and IEC61000-3-11

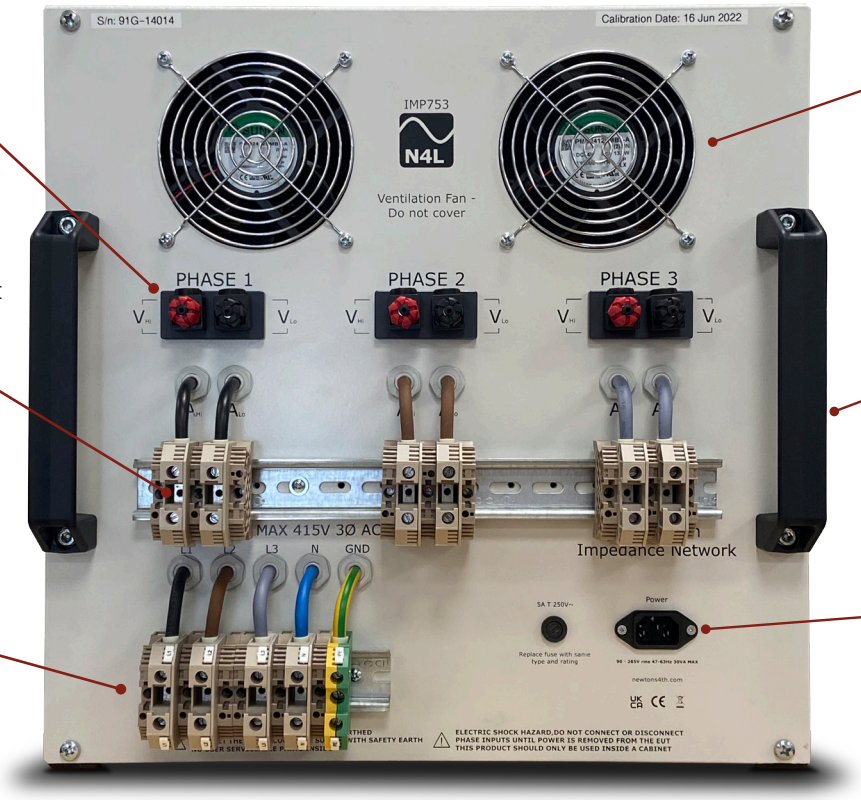
ISO17025 accredited calibration as standard.

Product Overview	
Fully Compliant	Fully Compliant to IEC61000-3-3 (IMP161, IMP163, IMP323 & IMP753) and IEC61000-3-11 (IMP323 & IMP753)
Air Core Inductors	Air Core Inductors are used in order to ensure inducatance remains within specification at all load points
ISO17025 Calibration Available	N4L's UKAS ISO17025 laboratory offers calibration of all IMP's at working currents
75A Maximum Current Capability	A wide range of impedance networks rated from 16Arms up to 75Arms
Convenient Mode Switch	A heavy duty mode switch on the front panel is used to set the impedance network between harmonics and flicker modes

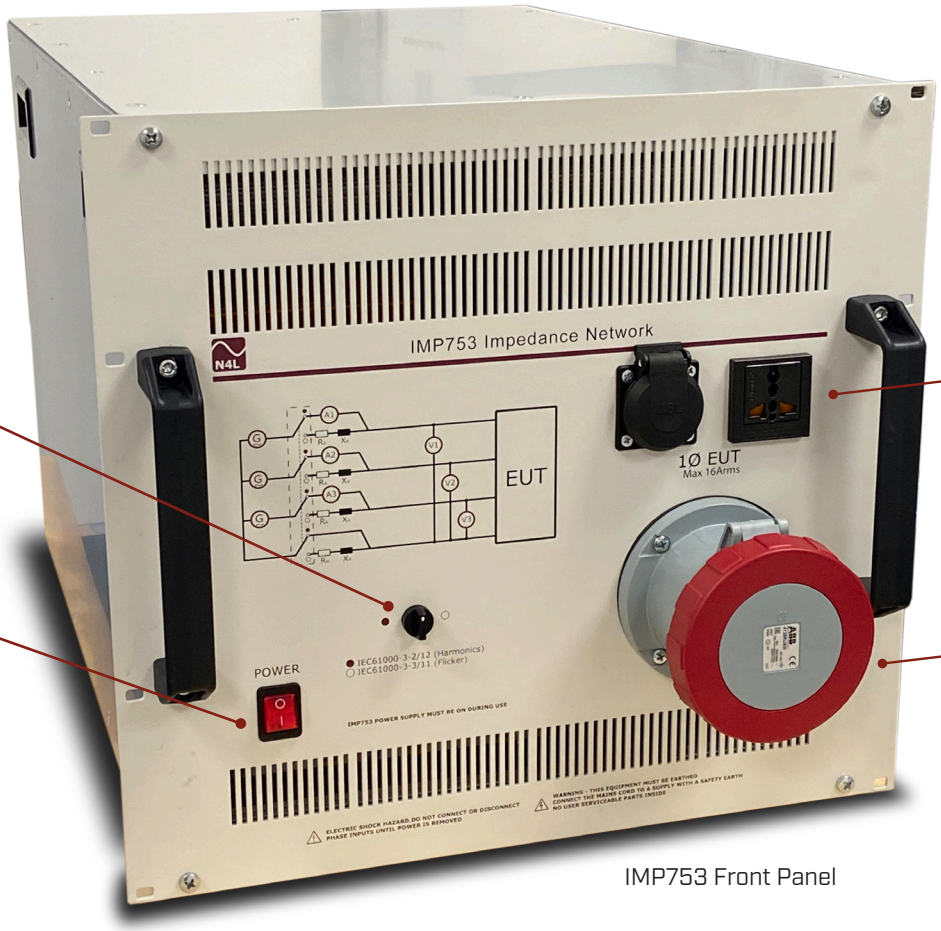
IMP753 - Upated June 2022

The IMP753 was updated in June 2022, enhancements include;

- Better cooling
- Thermal overload detection and automatic switchover in the case of an overheat event
- Electronic switching between "Harmonic" test mode and "Flicker" test mode via means of an electronic contactor
- Connectors changed to more easily accomodate large conductors



IMP753 Rear Panel



IMP753 Front Panel

Fully compliant Impedance Networks meeting IEC61000-3-3 and IEC61000-3-11 (IMP323 + IMP753)

There are 4 variants of the IMP series, ranging from single phase 16A rated units (IMP161) to three phase 75A rated units (IMP753). N4L impedance networks are designed with air core inductors to provide the XL component of Zref. Air core inductors are larger and more costly than Iron Core alternatives but offer superior linearity over the complete operating range.

Impedance Networks designed exclusively for the higher current IEC1000-3-11 standard (>16Arms) commonly employ lower impedance values permitted by this standard called Ztest. Correction of measured results across this lower impedance is ahcieved by applying a scaling factor but this method cannot be used when testing to the lower current IEC61000-3-3 standard (<16A).

All N4L Impedance Networks comply with Zref as defined in both IEC61000-3-3 and IEC61000-3-11. This permits the use of a single N4L impedance network in fully compliant tests for both standards, with no need to apply a scaling factor to acheive the correct measurement results.

SPECIFICATION				
	IMP161	IMP163	IMP323	IMP753
Parameter				
Maximum Current	16Arms	16 Arms/phase	32Arms/phase	75Arms/phase
No. of Phases	1	3	3	3
IEC61000-3-3 Compliance	YES			
IEC61000-3-11 Compliance	NO	NO	YES	YES
Line Resistance	240mOhm			
Line Reactance 50Hz(60Hz)	150mOhm(180mOhm)			
Neutral Resistance	160mOhm			
Neutral Reactance 50Hz(60Hz)	100mOhm(120mOhm)			
Impedance Limits	-10% ~ +6%			
Cooling	Forced Air			
Inductor Technology	Air Cored			
Single Phase Connector(s)	Universal : 16A Max Schuko : 16A Max			
Three Phase Connector	Not fitted	16A rated IEC 60 309-1, -2 (Position 6H 3P+N+E)	32A rated IEC 60 309-1, -2 (Position 6H 3P+N+E)	125A rated (75A max) IEC 60 309-1, -2 (Position 6H 3P+N+E)
Maximum Voltage Rating	250VAC Single Phase / 430VAC Three Phase			
Rack Space	4U	4U	6U	10U
Dimensions	W 450mm x D 500mm x H 180mm	W 450mm x D 500mm x H 180mm	W 450mm x D 500mm x H 220mm	W 450mm x D 688mm x H 445mm
Weight (Packed)	20kg	34kg	58kg	106kg

Distributed By:

Newtons4th Ltd
1 Bede Island Road
Leicester
LE2 7EA
UK

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