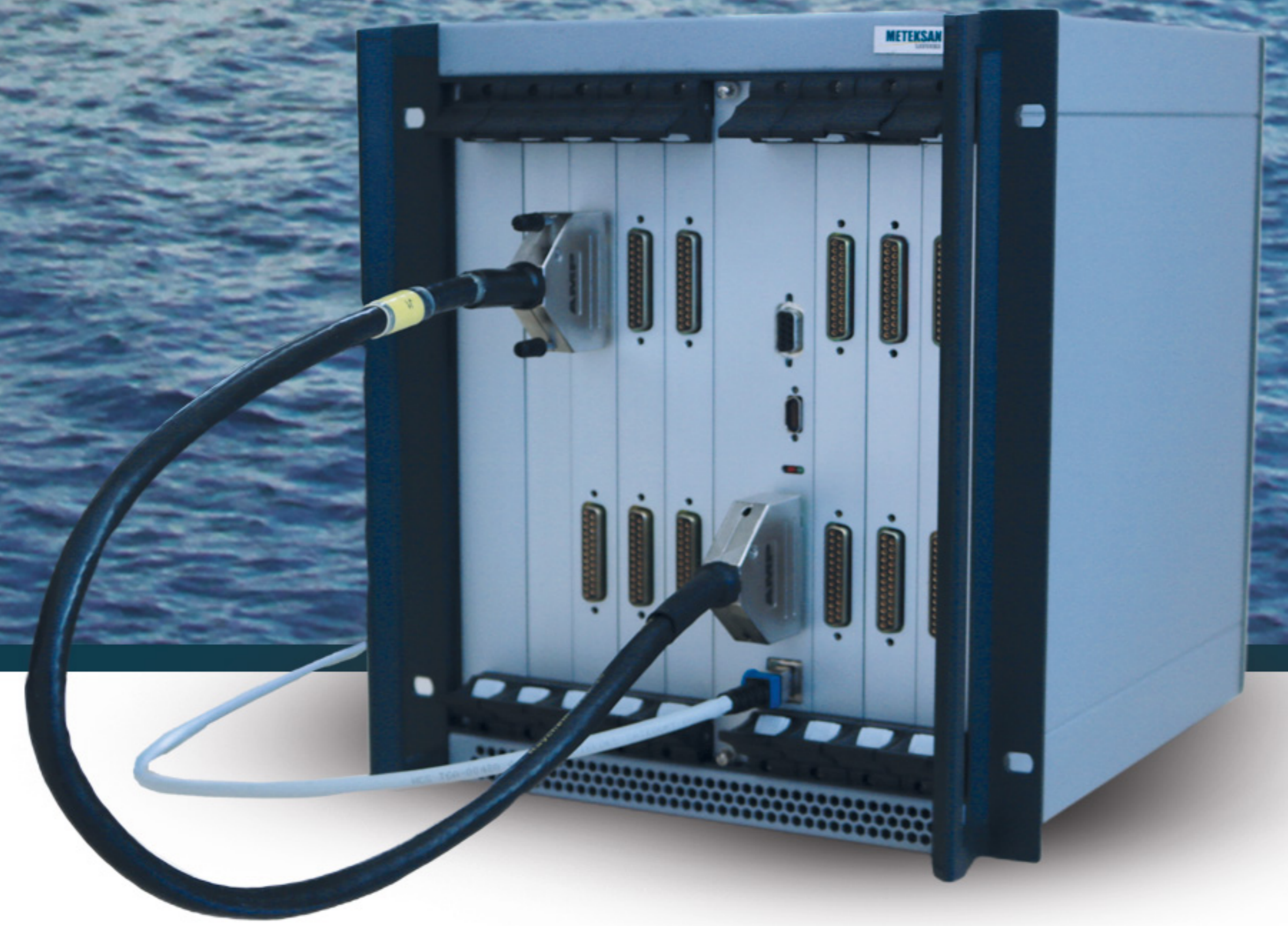


# Multi-Channel Acoustic Test Unit (ATU)



## Lab-to-Platform Full Testing

ATU is a unique and compact acoustic test device designed and developed by Meteksan Defense to test the front electronic units of structures with multiple hydrophone arrays end-to-end wherever needed.

## Synchronized Access to 96 Separate Channels

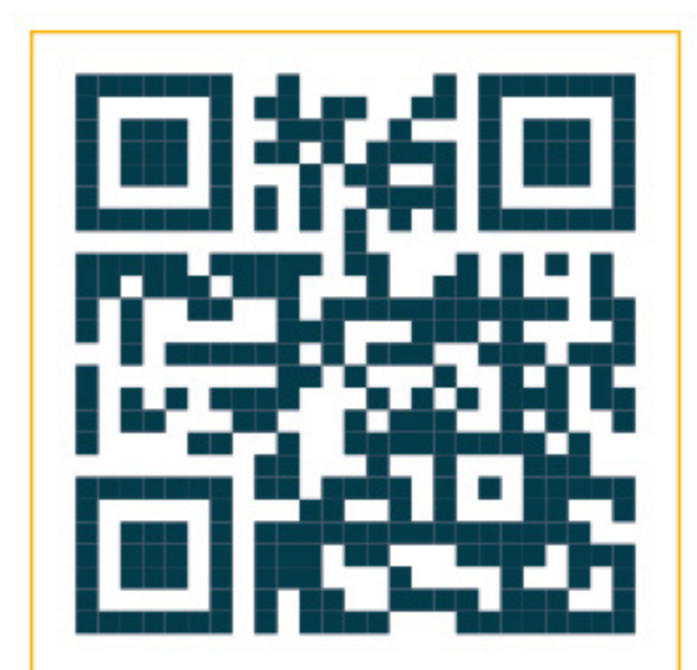
ATU is a 96-channel test unit and can test end-to-end units with multi-channel analog inputs. With the mobility and practical use it provides, it can produce solutions in any environment from lab to platform.

ATU has 3 modes: "Manual", "Emulation" and "Simulation".

The emulation mode allows to review old data by sending recordings from multiple hydrophone arrays to each channel. On the other hand, Simulation mode allows 96 channels to be fed with these raw data by creating the viewing environment by determining the features such as the environment, number of targets, signal shape as desired.

ATU will be able to operate in the 0-100 kHz frequency band in all modes and give synchronous output up to 96 channels. By making clock-sync connection of n Acoustic Test Units with each other, n\*96 channels will be tested.

Since ATU has the ability to test itself, it does not need an additional test unit and can be used very practically thanks to its low noise level.



# 96 Channel Acoustic Test Unit



## Compact & Practical

Acoustic Test Unit consists of 1 motherboard and 12 DAC cards. It takes the necessary data for acoustic signal generation from the test computer. With its compact design and quick-easy installation, it is suitable for use in all areas from the Lab environment to platforms that are docked or in navigation.

## Key Features



Expandable Number of Channels



Manual, Emulation and Simulation Modes



Self-Testing Ability



Easy and Fast Installation



Low Noise Level



Unique Design

## Technical Specifications

- With the ATU in-device test feature, the card temperature, supply voltages and elapsed time can be measured periodically.
- ATÜ produces continuous or pulsed signals in CW or FM types. It can adjust the amplitude and phase of each channel to different values in pulsed signal generation.
- ATÜ operates between 16 VDC and 50 VDC input voltage ranges.
- The phase error of the acoustic signals produced at ATU is less than 100 ns from channel to channel, and the noise level is lower than -140 dbV/Hz.
- ATU control is provided via the Ethernet interface.

