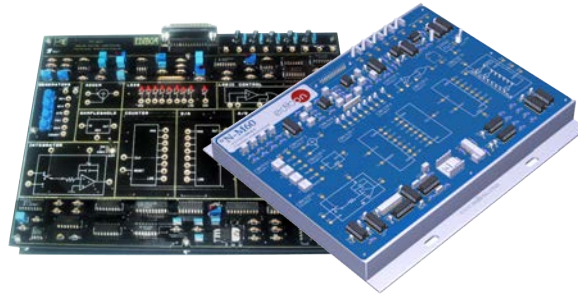


➤ **Digital Electronics**

M60/N-M60. Analog/Digital Converters



GENERAL DESCRIPTION

Most of the “information” generated in the world by different physical phenomena has a strong analogical character. This means that the information undergoes a continuous variation within certain limits determined over time. Of course, there is also information of a digital character, but its number is considerably smaller than that mentioned above.

When you need to process information, an analog signal, it is usually better to convert the signal to digital form so you can process it digitally. The reason is that the automatic processing of digital information involves great technological simplicity.

With the Analog/Digital Converters, “N-M60”, designed by EDIBON, the different types of analog/digital conversion can be studied. In addition, faults can be simulated in most of the circuits under study. The student must investigate what is happening in the circuit and why it is not working properly. These faults simulations can be of several types from damage components to a hypothetical incorrect circuit assembly.

PRACTICAL POSSIBILITIES

- 1.- Sampling theorem.
 - 2.- Monopolar simple ramp converter.
 - 3.- Monopolar double ramp converter.
 - 4.- Monopolar binary ramp converter.
 - 5.- A/D integrated converter. Monopolar assembly.
 - 6.- A/D integrated converter. Bipolar assembly.
 - 7.- Flash converter.
- Several other exercises can be done and designed by the user.

SPECIFICATIONS

- Circuit blocks:
- Generators.
 - D/A converter.
 - A/D converter.
 - Adder.
 - Sample & Hold.
 - Leds.
 - Logic control.
 - Integrator.
 - Counter.
 - Flash converter.

DIMENSIONS AND WEIGHTS

Dimensions: 300 x 210 x 45 mm approx.
(11.81 x 8.26 x 1.77 inches approx.)
Weight: 300 g approx.
(0.66 pounds approx.)

REQUIRED ELEMENTS (NOT INCLUDED)

- Required (at least one):
- FACO. Power Supply.
 - EBC100. Base Unit, with built-in power supply.

ADDITIONAL RECOMMENDED ELEMENTS (NOT INCLUDED)

- Recommended (only one):
- EDAS/MIS-0.25. EDIBON Data Acquisition System and Virtual Instrumentation (speed: 250,000 samples/s). or
 - EDAS/MIS-1.25. EDIBON Data Acquisition System and Virtual Instrumentation (speed: 1,250,000 samples/s).