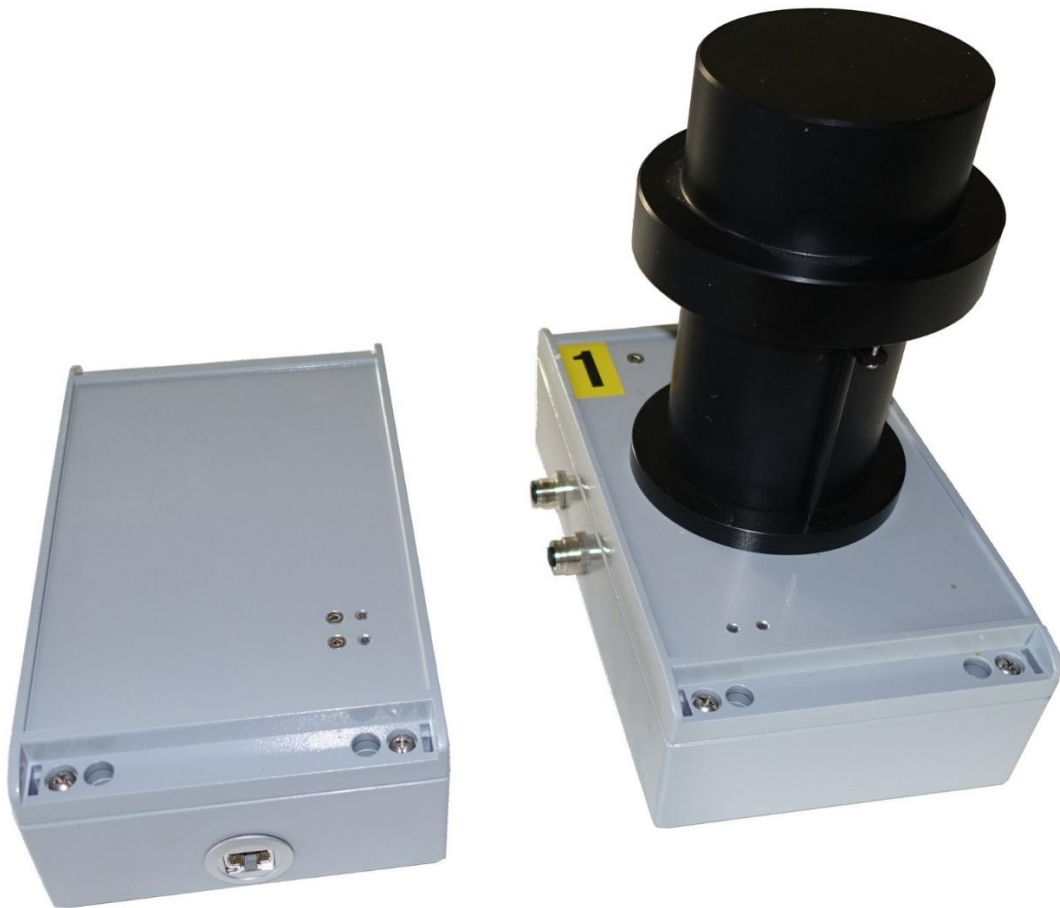


ALPHA COUNTING FACILITY Type 7287



7287 System with control unit and one counter unit

The 7287 system has been developed principally for thermoluminescence (and similar) dating where the counting rate is small and a very low background is essential. Each 7287 system can have up to eight scintillation/photomultiplier assemblies.

Samples of material to be tested are put onto scintillator film and placed in an acrylic holder that is put on the top the photomultiplier in a light tight housing.

A 7287 system comprises of one control unit and up to 8 photomultiplier scintillation counter units. The control unit is connected to the standard IP computer network via an RJ45 connector. The photomultiplier units connect to the control unit via a RS485 serial bus. The system is controlled via a web interface in the control unit.

Each photomultiplier tube has its own individually adjustable high voltage supply and discriminator circuit. The output pulses from the discriminator circuits are fed into an internal microprocessor which keeps track of the total number of counts and also the number of times counts occur within 4mSec of each other (called fast pairs) and those that occur between 20 and 400mSec apart (slow pairs). The pair counts allow estimates of the thorium and uranium content to be calculated by the system.

The microprocessor can be set to accumulate counts over any period from 10 to 65,000 seconds. At the end of this period the number of counts and the number of slow and fast pairs are saved and a new period is started. At the end of a specified number of periods (or on demand) the accumulated data can be viewed via the built in web interface using any JavaScript compatible web browser (Recent versions of Internet Explorer, Google Chrome, Mac Safari, iPad etc). Count data can be downloaded in a variety of formats for further processing.

7287 SPECIFICATIONS

Max number of counters	8
Photomultiplier type	EMI 6097B
Recommended scintillator	ZnS on Mylar film (44mm diameter)
High voltage supply for PM Tubes	450 to 1500V adjustable via web interface
External connections	RJ45 for network connection 18V DC Power connector (external mains power supply provided)
Control	Web interface allows setting of PM voltage and discriminator threshold for each counter
Power	100-240V AC, 6W + 5W per counter unit
Dimensions mm (inches)	Control unit: 220 (8.7) x 140 (5.5) x 75 (3) high. 1.25Kg PM Assembly: 220 (8.7) x 140 (5.5) x 230 (9) high. 2.6Kg

LITTLEMORE SCIENTIFIC ENGINEERING (ELSEC)

中国区总代理：上海永毓科学仪器有限公司

电话：021-56482765

E-mail: yongyuins@163.com