

OTM - DRUM

Counting chamber
volume: 560 L

Six plastic scintillator
detectors EJ-200

Energy range: 40 KeV
– 3 MeV

Detection area per
detector: 5000/2500
cm²

Each detector includes
its own HV source and
PMT

MDA of less than 1000
Bq of Cs137 @ 1 seg.

20 mm of Lead
shielding around the
counting chamber

Weigh scale 1000 kg

Alarms 100%
configurable

Single door and 10”
screen

Independent and
autonomous operation

Software HS-RAD
100% configurable

Windows 7 or 10



The OTM-DRUM has been designed for the detection and measurement of gamma radiation on potentially exposed tools and objects.

It includes four 100x50x5cm and two 50x50x5 cm plastic scintillator detectors with PMT and six HV sources. This guarantees that the detectors perform in their optimum operating conditions, providing an excellent signal output.

The typical efficiencies obtained for one detector are:
>30% (Co-60), >15% (Cs-137), >6% (Ba-133).

OTM - DRUM

Counting chamber
volume: 560 L

Six plastic scintillator
detectors EJ-200

Energy range: 40 KeV
– 3 MeV

Detection area per
detector: 5000/2500
cm²

Each detector includes
its own HV source and
PMT

MDA of less than 1000
Bq of Cs137 @ 1 seg.

20 mm of Lead
shielding around the
counting chamber

Weigh scale 1000 kg

Alarms 100%
configurable

Single door and 10”
screen

Independent and
autonomous operation

Software HS-RAD
100% configurable

Windows 7 or 10

The equipment is shielded with a 20 mm lead sheet to minimize the background contribution.

In case of high background environments, the lead shielding can be incremented.



Stability and durability are provided by means of an aluminum structure and the steel cover plates.

OTM - DRUM

Counting chamber
volume: 560 L

Six plastic scintillator
detectors EJ-200

Energy range: 40 KeV
– 3 MeV

Detection area per
detector: 5000/2500
cm²

Each detector includes
its own HV source and
PMT

MDA of less than 1000
Bq of Cs137 @ 1 seg.

20 mm of Lead
shielding around the
counting chamber

Weigh scale 1000 kg

Alarms 100%
configurable

Single door and 10”
screen

Independent and
autonomous operation

Software HS-RAD
100% configurable

Windows 7 or 10

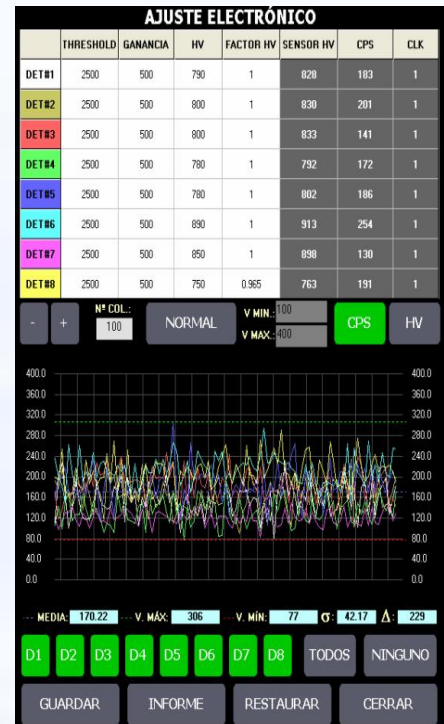
Each detector’s
operating parameters
can be customized
individually.

The counting measure
is displayed showing
the information
provided by each
detector, making
possible to asses the
contaminated area.

The equipment monitors the background
constantly and starts the operation when an
object is detected inside the counting chamber.

Alarms and threshold can be easily set
depending on user’s requirements. This
includes high and low background alarm, high
counting alarm, etc.

An audio interface provide instructions and
status update to the user. Male or female voice
can be selected.



OTM - DRUM

Counting chamber
volume: 560 L

Six plastic scintillator
detectors EJ-200

Energy range: 40 KeV
– 3 MeV

Detection area per
detector: 5000/2500
cm²

Each detector includes
its own HV source and
PMT

MDA of less than 1000
Bq of Cs137 @ 1 seg.

20 mm of Lead
shielding around the
counting chamber

Weigh scale 1000 kg

Alarms 100%
configurable

Single door and 10”
screen

Independent and
autonomous operation

Software HS-RAD
100% configurable

Windows 7 or 10

An user friendly display guides the user through all the equipment configuration menu.

All the recorded data is stored and managed by system, making possible to export it via USB.



REGISTRO DE ACCESOS Y SEGURIDAD

CLAVE OFF: CLAVE DE EQUIPO: REPITA LA CLAVE: GUARDAR

USUARIOS: ADMINISTRADOR RESTAURAR

NUEVO ACTIVO ELIMINAR

CLAVE OFF: CLAVE NUEVA: REPITA LA CLAVE: NIVEL DE SEGURIDAD: NIVEL 01

ÚLTIMA FECHA DE ACCESO:

USUARIO	NIVEL	FECHA	HORA	ACCIÓN
ADMINISTRADOR	1	01/06/12	11:59:45	DESBLQUEAR EQUIPO
ADMINISTRADOR	1	01/06/12	12:02:29	DESBLQUEAR EQUIPO
ADMINISTRADOR	1	01/06/12	12:49:03	DESBLQUEAR EQUIPO
ADMINISTRADOR	1	01/06/12	12:57:13	DESBLQUEAR EQUIPO
ADMINISTRADOR	1	01/06/12	13:01:01	CAMBIAR AJUSTES BARRERAS
ADMINISTRADOR	1	01/06/12	13:01:42	SALIR DE APLICACIÓN
ADMINISTRADOR	1	01/06/12	13:02:36	DESBLQUEAR EQUIPO
ADMINISTRADOR	1	01/06/12	13:02:52	SALIR DE APLICACIÓN
ADMINISTRADOR	1	01/06/12	13:04:52	DESBLQUEAR EQUIPO
ADMINISTRADOR	1	01/06/12	13:04:54	SALIR DE APLICACIÓN
ADMINISTRADOR	1	01/06/12	13:10:24	DESBLQUEAR EQUIPO
ADMINISTRADOR	1	01/06/12	13:33:43	DESBLQUEAR EQUIPO
ADMINISTRADOR	1	01/06/12	13:33:45	SALIR DE APLICACIÓN
ADMINISTRADOR	1	01/06/12	13:47:12	DESBLQUEAR EQUIPO
ADMINISTRADOR	1	01/06/12	13:47:14	SALIR DE APLICACIÓN
ADMINISTRADOR	1	01/06/12	13:49:46	DESBLQUEAR EQUIPO
ADMINISTRADOR	1	01/06/12	13:49:55	SALIR DE APLICACIÓN
ADMINISTRADOR	1	01/06/12	14:30:24	DESBLQUEAR EQUIPO

FILTRAR POR: USUARIO: FEC. ENTRE: Y: HORA ENTRE: Y:

NIVEL DE SEGURIDAD: TIPO DE ACCIÓN:

FILTRAR CERRAR

Calibration of the equipment can be easily performed following the system instructions.

The software is 100% configurable according to user's requirements.

OTM - DRUM

Counting chamber
volume: 560 L

Six plastic scintillator
detectors EJ-200

Energy range: 40 KeV
– 3 MeV

Detection area per
detector: 5000/2500
cm²

Each detector includes
its own HV source and
PMT

MDA of less than 1000
Bq of Cs137 @ 1 seg.

20 mm of Lead
shielding around the
counting chamber

Weigh scale 1000 kg

Alarms 100%
configurable

Single door and 10”
screen

Independent and
autonomous operation

Software HS-RAD
100% configurable

Windows 7 or 10

A roller conveyor can be installed as an optional to help the user to introduce the drums inside the equipment.



**The required power supply can be customized:
220 VAC / 110 VAC.**

**Optional detectors like NaI, LaBr3 or CZT can be
included in the design to obtain high quality
spectrums**

**The total weight, including 20 mm of lead
shielding, is approximately 5000 kg.**

**The external dimensions are 170x95x95cm
(HxDxW) approx.**



HELGESON
SCIENTIFIC SERVICES

OTM - DRUM

Counting chamber
volume: 560 L

Six plastic scintillator
detectors EJ-200

Energy range: 40 KeV
– 3 MeV

Detection area per
detector: 5000/2500
cm²

Each detector includes
its own HV source and
PMT

MDA of less than 1000
Bq of Cs137 @ 1 seg.

20 mm of Lead
shielding around the
counting chamber

Weigh scale 1000 kg

Alarms 100%
configurable

Single door and 10”
screen

Independent and
autonomous operation

Software HS-RAD
100% configurable

Windows 7 or 10

HSS has designed and manufactured the OTM series for end user's with different purposes: nuclear safety, R&D, etc.



More than 40 years of experience delivering high quality products demonstrates our commitment with our customers satisfaction.



HELGESON
SCIENTIFIC SERVICES