ABT

ADVANCEDBLASTING TECHNOLOGY INC

ROUGH BLAST HOLE VOD

EASYPROBE SYSTEM

Robust device for easy VOD measurements
Operates in wet holes
Immune to electromagnetic fields

For this you need

Blast hole cable

Surface cable

Explomet-fo-2000

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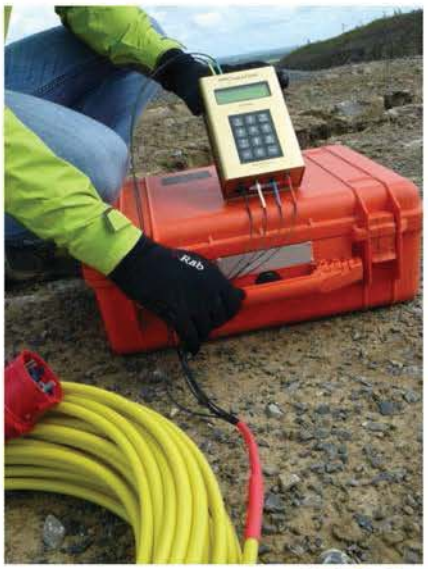


Surface Cable
Technical Details

The **Surface Cable** of **ABTi, Inc** works with the latest Optic Fiber Technology. It transmits the information from the source to analyze to the explomet-fo-2000 at the speed of light. The **Surface Cable** is the most usefull tool to proceed to VOD in all environnement: quarry, mine, tunnel, underwater measurements, in vaquo measurements, laboratory experiments, space program, etc...

With the **Surface Cable** and the Explomet-fo-2000, you can:

- do the usual velocity measurement on all explosives, detonating cords, propellants and pyrotechnics,
- make accurate continuous VOD measurement: With 6 probes placed 30 cm apart the Explomet will measure every 50 microseconds the VOD of an explosive detonating at 6000m/s.
- make a perfect curve of the events.
- measure time intervals on explosives of various forms
- operate under confinement, for example in a metal tube or in a blast hole
- measure the delay of non electric detonators (shock tube detonators)
- measure the delay of electric detonators together with the DETOMET™ instrument.

OPERATION: **(see also Technical Drawing Explomet-fo-2000)**

1. prepare the optical termination**(see cable termination 0001)**
2. plug one end of the probes into the explosive (leave a certain distance for safety reasons) and the other end into the **Surface Cable**. Then, plug the end of the surface cable into the EXPLOMET-FO-2000™.
3. chose the operating mode and follow the indications on the display, if requested introduce the length.
4. Fire.
5. Read on the display, the Velocity Of Detonation and, or the time interval between the illuminationbof the probes.
6. Optionally save your results for later transfer to PC.

Note: the probes will be destroyed by the explosion but not the **Surface Cable**

SPECIFICATIONS SURFACE CABLE:

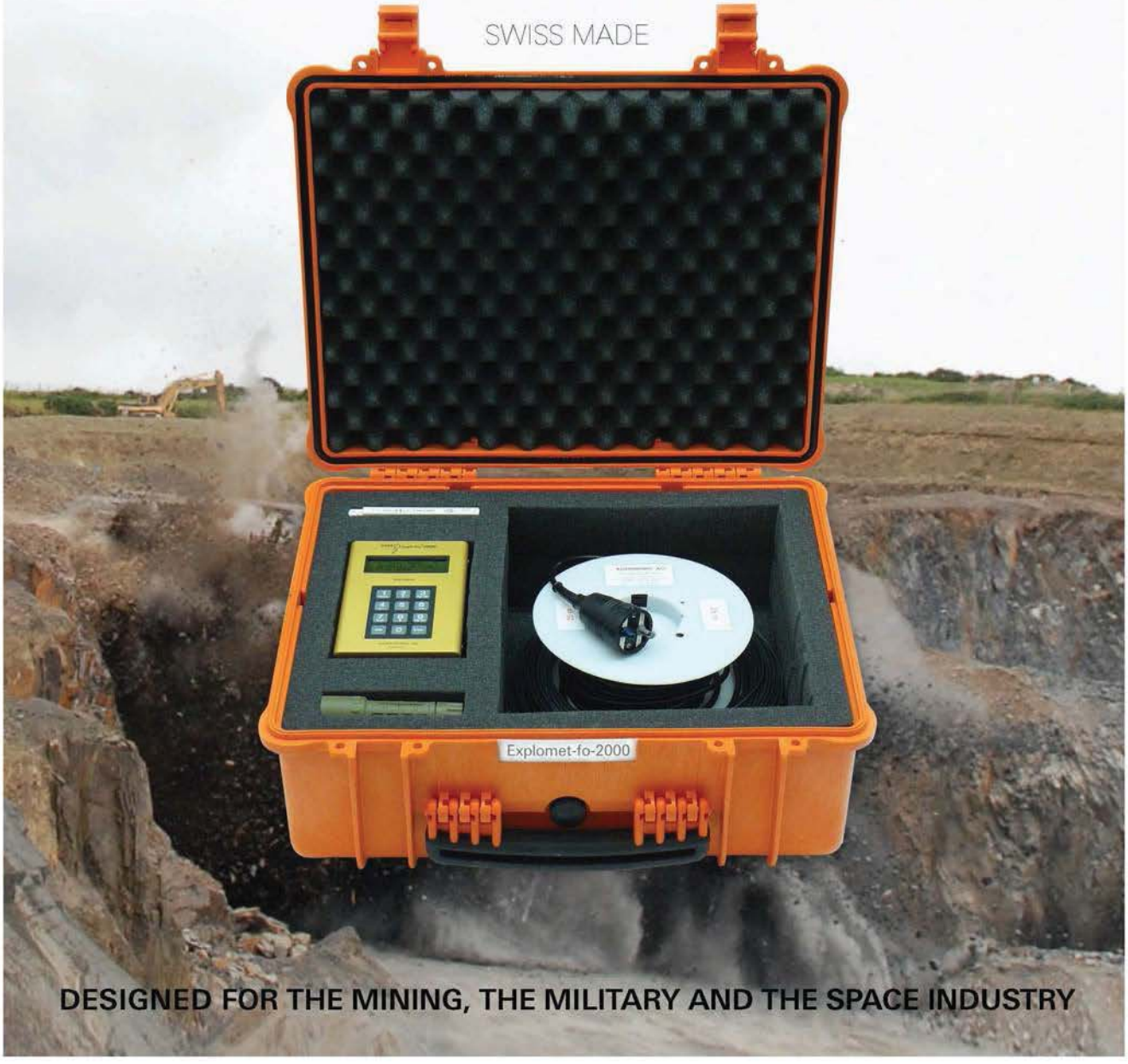
Length:	50 meters
Material:	6 channels of Plastic Optic Fiber with reinforced core
Plug:	6 special connectors with color code for easy identification
Fiber Optic:	plastic optic fiber cable: core: 1 mm diameter, jacket: 2.2 mm diameter
Characteristic:	Reusable
Origin:	SWISS MADE

explomet-fo-2000®

Velocity Of Detonation meter

ADVANCED BLASTING TECHNOLOGY INC

ROBUST DEVICE FOR EASY VOD MEASURES
RELIABLE FIBER OPTIC TECHNOLOGY
TRUSTED BY HUNDREDS OF PROFESSIONALS
OPERATED IN MORE THAN 50 COUNTRIES



DESIGNED FOR THE MINING, THE MILITARY AND THE SPACE INDUSTRY

MEASURING METHOD AND PRINCIPLE OF OPERATION

The EXPLOMET-FO-2000™ has 5 independent timers measuring the time intervals between the illumination of 6 optical probes. One of the probes starts all the timers. Then every triggered probe stops its timer. Results are displayed instantly. The Explomet operates in one of the following modes:

- Velocity and Time: The probes must be illuminated in ascending order, ie P1, P2, P3, P4, P5 and P6. The EXPLOMET™ measures the time intervals between the illumination of two consecutive probes and calculates the Velocity Of Detonation.

- Time only: The probes are illuminated randomly. The EXPLOMET™ measures the time intervals between the illumination of the first and the second probe, then between the second and the third probe, and so on until all time intervals have been measured.

USER FRENDLY

Menu driven operation on an easy to read 4 lines display.
Save up to 100 results in the internal memory.
Transfer the results to a Window-PC via the RS-232 serial interface and read them with a spreadsheet program.

SWISS QUALITY

Reliability

Reliable technology in a robust anodized aluminum case.
Fiber optic probes provide perfect immunity against electromagnetic noise.

Precision

Time measurement: +/- 0.1 microsecond.

Safety

Distance between the EXPLOMET-FO-2000™ and the blasting site up to 200 m.

EASY VOD MEASURE

Easy use

Basic familiarity with explosive handling is sufficient to operate the EXPLOMET-FO-2000.
The use of optical probes permits detonating velocity measurement on very short cartridges.
Fast setup, the user only has to plug the optical probes in the explosive cartridge.
Each measure destroys only approximately 20cm of optical probe.
Can be adapted to any existing site (with fixed cables).

Portable

Only 5kg with all attachments in a rugged case for easy transportation to the blasting site.

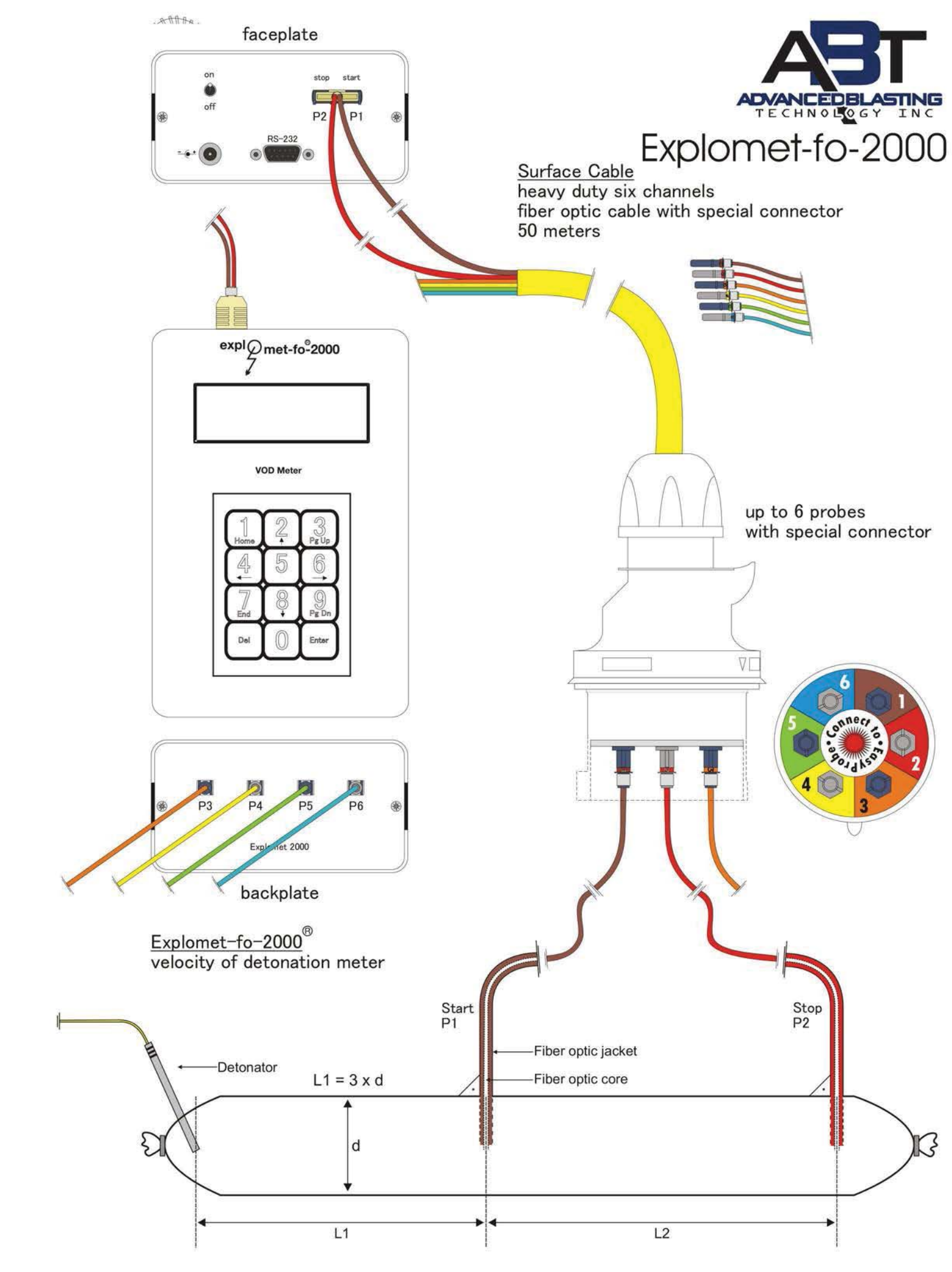
Operates on batteries

Over 40 hours autonomy, rechargeable with AC/DC adapter/charger.

EXAMPLES

The EXPLOMET-FO-2000 measures

- VOD of all explosives, detonating cords, propellants and pyrotechnics
- Under confinement,VOD in a metal tube or in a blasthole
- Continuous VOD with up to 6 probes
- Time intervals on explosives of various forms
- Delay of non electric detonators (Shock Tube detonators)
- Delay of electric detonators together with the DETOMET™ instrument


faceplate
on
off
stop
start
P2
P1
RS-232
Explometer-fo-2000
Surface Cable
heavy duty six channels
fiber optic cable with special connector
50 meters
explometer-fo-2000
VOD Meter
1 Home
2
3 Pg Up
4
5
6
7 End
8
9 Pg Dn
Del
0
Enter
up to 6 probes
with special connector
Connect to • EasyProbe •
1
2
3
4
5
6
P3
P4
P5
P6
Explomet 2000
backplate
Explomet-fo-2000®
velocity of detonation meter
Start
P1
Stop
P2
Fiber optic jacket
Fiber optic core
Detonator
L1 = 3 x d
d
L1
L2

EasyProbe System