



Mobile Laboratories for On-Site Measurements

Features

- Custom-built radio-analytic laboratories based on a variety of transportation options.
- Rugged, accurate instrumentation specially modified for demanding mobile applications.
- Extensive experience with a variety of vehicle configurations and monitoring requirements.
- Finished interiors maximize available space.
- Heating, air conditioning, lighting and electrical systems supplied.

Description

Mobile laboratories are a convenient way to provide radio-analytical capabilities at locations difficult or impossible to serve from central facilities. Whether a key portion of an emergency response team or an on-site facility for human or animal whole-body counting, mobile laboratories play an increasingly important role in environmental monitoring.

Put Our Experience to Work

Successfully outfitting a van, truck, or trailer with sophisticated counting equipment originally designed for a benign laboratory environment is not a simple matter. Mobile applications require special modifications to equipment – such as stronger construction and shock mounts – to withstand extra abuse.

Canberra has built more than 30 mobile laboratories for a variety of analytical applications worldwide (see list). This is extremely valuable experience for future designs. We manufacture a complete range of radio-analytical instruments and therefore understand the special measures that must be taken to ensure that our equipment performs reliably under the rough conditions encountered in mobile laboratories. In fact, our warranties do not normally cover equipment installed in mobile laboratories, except when those labs are designed and built by us.



Mobile Laboratories Designed and Built by Canberra		
Customer	Vehicle	Application
DuPont-1	22 ft truck body	Whole body counting
DuPont-2	22 ft truck body	Whole body counting
DuPont-2	22 ft truck body	Whole body counting
Atomic Energy Lab	40 ft trailer	Whole body counting
Saudi Arabia-1	40 ft trailer	Emergency response
Saudi Arabia-2	18 ft trailer	Live animal WBC
Saudi Arabia-3	18 ft trailer	Live animal WBC
Saudi Arabia-4	18 ft trailer	Live animal WBC
Saudi Arabia-5	18 ft trailer	Live animal WBC
State of Illinois	24 ft truck body	Emergency response
US Dept. of Energy	4-wheel-drive truck	Uranium exploration
Cameco Uranium	40 ft trailer	Uranium lung counter
RMC Rental Svs.-1	28 ft goose-neck trailer	Whole body counting
RMC Rental Svs.-2	28 ft goose-neck trailer	Whole body counting
RMC Rental Svs.-3	28 ft goose-neck trailer	Whole body counting
RMC Med. Emergency	20 ft truck	Whole body counting
State of Michigan	24 ft motor home	Environ. monitoring
RMC Environ. Meas.	22 ft truck body	Environ. counting
Three Mile Island-1	40 ft trailer	Whole body counting
Three Mile Island-2	35 ft wheelless trailer	Whole body counting
Oyster Creek	35 ft wheelless trailer	Whole body counting
Palos Verde	35 ft wheelless trailer	Whole body counting
KAPL	35 ft module	Uranium lung counter
Gov't of Germany-1	40 ft trailers	Chernobyl WBC
Gov't of Germany-2	40 ft trailers	Chernobyl WBC
Gov't of Germany-3	40 ft trailers	Chernobyl WBC
Gov't of Germany-4	20 ft ISO module	Chernobyl WBC
State of Virginia	24 ft truck body	Emergency response
Taiwan	18 ft van	Emergency response
Oak Ridge Nat. Labs	40 ft semi-trailer	Uranium lung counter
US Army	Air transportable module	Alpha/beta/gamma
Duquesne Power Co.	45 ft trailer	Whole body counting

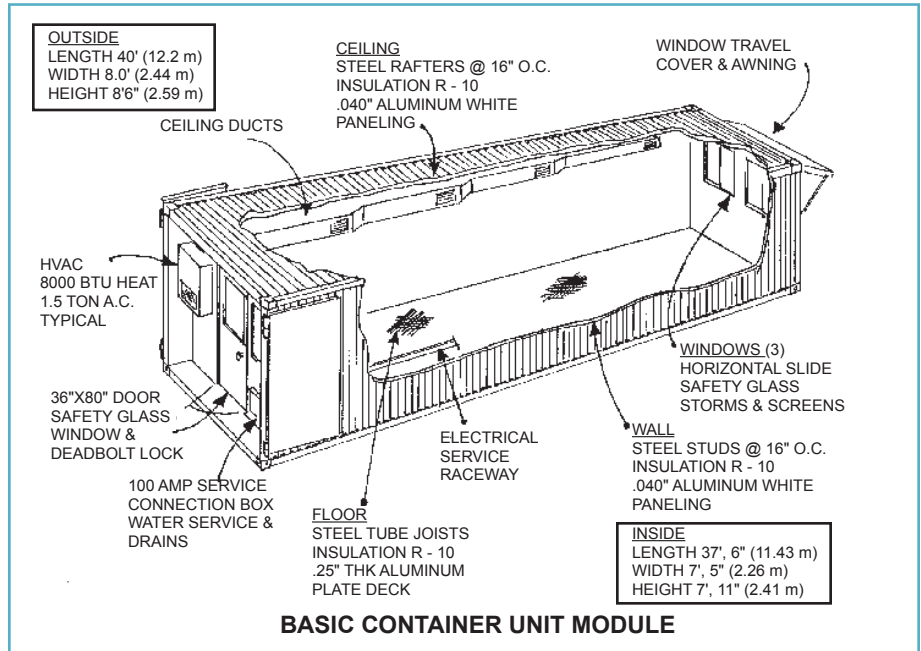
What is the Best Type of Vehicle?

Vehicle motors and drive trains require regular maintenance and may be subject to unexpected problems. Depending on needs, a tractor-trailer-based laboratory can provide a reliable option. With a truck or van, a defective motor makes the entire laboratory unusable. However, with a tractor-trailer arrangement, the tractor unit with motor and drive train can be quickly replaced.

Counting systems and allied equipment often are quite heavy and must be properly placed in vehicles designed for such loads. Small vehicles require clever techniques to comply with vehicle load specifications, road regulations, and still provide a useful working laboratory.

Canberra's Turnkey Solutions

Canberra supplies turnkey mobile laboratory solutions, which include laboratory design, equipment selection, installation, calibration and training. Most of the mobile testing laboratories listed were completely designed by Canberra. They draw on our expertise as a manufacturer of radiation detection systems and years of experience providing solutions to practical applications.



Canberra's ISO Standard Mobile Laboratory Module

- Worldwide standard modular lengths: 3.0 m (10 ft), 6.1 m (20 ft) and 12.2 m (40 ft).
- Modules readily shipped by sea, rail, road or air.
- Adaptable to common methods of local transportation, either temporary (put on truck or trailer) or permanent (attach wheels to module).
- Generous usable interior dimensions designed and equipped per customer requirements.
- Pre-finished aluminum walls and ceiling; thick aluminum diamond-plate floor, R-10 insulation, fire-proof construction.

The ISO international sea freight container – available in standard modular sizes – is commonly recommended because of the myriad vehicle regulations around the world. Container modules then are mated with suitable vehicles available in, and conforming to rules in, the destination country.

Laboratories based on these modules are spacious and comfortable. Their completely finished interiors include heating, air conditioning, lighting and electrical distribution. Based on user requirements, Canberra designs the laboratory, selects and installs equipment, and provides training through its worldwide service organization.

Usable interior dimensions are 2.41 m (95 in.) high, 2.26 m (89 in.) wide and 2.3 m (7.6 ft), 5.4 m (17.6 ft) or 11.4 m (37.6 ft) long.

