

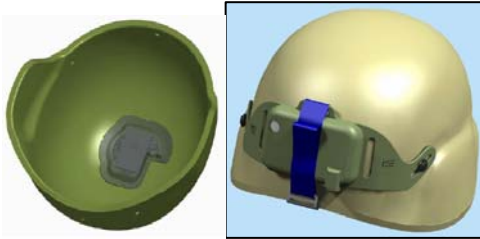


# MARINE CORPS SYSTEMS COMMAND

Combat Equipment & Support Systems (CESS)  
Program Manager, Infantry Combat Equipment



## Helmet Sensor



### Requirement

21 Apr 08, USON from DC, CD&I directed two Infantry Bn's be equipped with helmet sensors by 4th Qtr FY08.

### Overview

The Helmet Sensor is a small, lightweight, low-power sensor suite that mounts to the Lightweight Helmet. The Helmet Sensor will detect, measure and record impact (acceleration in three degrees of freedom) and blast overpressure associated with concussive events/IED blasts that Marines may experience in operational environments.

### Features

The internal helmet sensor mounts to the inside of the crown of the helmet. It weighs 1.23 oz and contains a rechargeable battery. The memory can store over 600 events, and the pressure sensor discriminates from non-significant events (dropped helmets). Data is downloaded via micro-USB to any computer.

The external helmet sensor mounts to the rear exterior of the helmet and fits underneath the cover. It weighs approx 6 oz, and contains a battery with a 6-8 month life. The pressure sensor records peak overpressure and impacts events above a 200g threshold are recorded. The memory allows for storage of up to 527 events. Data is downloaded via a mini USB cable.

### Fielding Status

Helmet Sensor	Unit	Qty	Fielding Date
Internal Mount	3/8	1200	Aug 2008
External Mount	1/4	1200	Aug 2008

### Training

Training was provided through contractor support teams.

### Supply/Logistics

The internal and external helmet sensors were provided as a limited fielding to two infantry battalions. Additional helmet sensors will be fielded as technology matures, and as requirements for additional data collection are provided.

### Production:

- The internal sensor is manufactured by BAE Systems in Phoenix, AZ.
- The external sensor is manufactured by Allen Vanguard, Inc. in Ottawa, ON.

### Manuals

A use and care manual accompanies each helmet sensor.

### Project Officer

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