

CLAIMS

What is claimed is:

1. A medical device storage case, comprising:
 - a base;
 - a case insert connected to the base;
 - an insert hump connected to the case insert and structured to position a medical device within a cavity at least partially formed by the case insert;
 - at least a portion of a sensor located within the insert hump and configured to detect a feature of the medical device, wherein:
 - a width of a distal end of the insert hump is smaller than a width of a proximal end of the insert hump.
2. The medical device storage case of claim 1, wherein the feature of the medical device is the presence and/or absence of the medical device within the cavity.
3. The medical device storage case of claim 1, wherein the insert hump primarily extends from a wall of the case insert towards an opposite wall of the case insert.
4. The medical device storage case of claim 3, wherein the distal end of the insert hump is spaced apart from the opposite wall of the case insert.
5. The medical device storage case of claim 1, wherein a height of the distal end of the insert hump is lower than a height of the proximal end of the insert hump.
6. The medical device storage case of claim 1, wherein the portion of the sensor is located within the distal end of the insert hump.
7. The medical device storage case of claim 6, further comprising an electronic component having a height greater than the portion of the sensor, the electronic component being located within the proximal end of the insert hump.
8. The medical device storage case of claim 1, wherein the case insert comprises a side wall that extends below a floor of the case insert.

9. A medical device storage case, comprising:
- a base;
 - a case insert connected to the base;
 - a first latitudinal insert hump connected to the case insert;
 - a second latitudinal insert hump connected to the case insert; and
 - a first portion of a sensor located within the first latitudinal insert hump and a second portion of the sensor located within the second latitudinal insert hump, the portions of the sensor being configured to detect a feature of a medical device positioned between the first and second latitudinal insert humps.
10. The medical device storage case of claim 9, wherein distal ends of the first and second latitudinal insert humps face each other across a center axis of the case insert.
11. The medical device storage case of claim 10, wherein:
- each of the distal ends of the first and second latitudinal insert humps comprise a sensor aperture, and
 - the sensor apertures are aligned with each other across the center axis of the case insert.
12. The medical device storage case of claim 9, further comprising:
- a first longitudinal insert hump connected to the case insert; and
 - a second longitudinal insert hump connected to the case insert.
13. The medical device storage case of claim 12, wherein:
- distal ends of the first and second longitudinal humps face each other across a center axis of the case insert, and
 - the distal ends of the first and second longitudinal humps do not face a distal end of the first or second latitudinal insert hump.
14. The medical device storage case of claim 12, wherein a distal end of each of the first and second longitudinal insert humps comprise a sensor aperture aligned with a sensor aperture located within a distal end of the first or second latitudinal insert hump.
15. The medical device storage case of claim 12, wherein a portion of a sensor is located within at least one of the first and second longitudinal insert humps.
16. The medical device storage case of claim 12, further comprising a separating wall extending from a distal end of the first longitudinal hump.
17. The medical device storage case of claim 16, wherein the separating wall is located between two sensor apertures positioned at the distal end of the first longitudinal hump.

18. The medical device storage case of claim 12, wherein:
distal ends of the first and second longitudinal humps extend towards each other, and
distal ends of the first and second latitudinal humps extend towards each other.

19. The medical device storage case of claim 18, wherein the distal ends of the first and second longitudinal humps do not extend in the same direction the distal ends of the first and second latitudinal humps extend.