



## Case Study: Taking A Closer Look Inside of the Medtronic Fastpak

Alpha Source conducted a quality experiment to compare the differences between 4 battery packs manufactured by the OEM, Alpha Source and 2 competitors to see if there were any identifiable differences. Each pack was compared on 12 different factors.

NiCd 12V Medtronic Fastpak (Alpha Source Part Number: AS10473)												
Manufacturer	Mechanical Durability	Mechanical Construction	Electrical	Cell Manufacturer	Cell Rating	Cell Part #	Cell Type	Cell Pack Construction	Pack Ah	Wire Harness	Connectors	Safety Marks
OEM	Thick walled case that requires structural damage to gain access to batteries	Ultrasonic weld - inside ridge	4 welds per cell terminal	Sanyo	1.2V - 1300mAh	Proprietary	Assume Rapid Charge	Paper tubes - No glue - Foam double sided tape	1 Ah	Internal solder with 300V stranded wire	Heat staked sockets - Silver	CE (MDD)
Alpha Source	Thick walled case that requires structural damage to gain access to batteries	Ultrasonic weld	6 welds per cell terminal	Sanyo	1.2V - 1300mAh	N-1300SCR	Rapid charge	Hot glue - Foam double sided tape	1.3 Ah	Nickel strapping welded to connectors	Heat staked sockets - Brass	CE (MDD)
Competitor 1	Case can be opened once screws are out with minimal force	Glue - Riveted Metal latch	4 welds per cell terminal	Sanyo	1.2V - 1300mAh	KR-1300SC	NOT Rapid Charge	Hot glue - Foam double sided tape	1.3 Ah	300V stranded wire with insulated nickel strapping	Heat staked sockets - Brass	none
Competitor 2	Thin wall construction. Extremely easy to open once screws are out	Seems to be only small mechanical clips...no glue	6 small welds per cell terminal	Saft	1.2V - 1600mAh	VRE Cs 1600	Rapid charge	Silicone...does not bond or hold cells together	1.3 Ah	Thin Gauge - Not rated wire to insulated nickel strapping	Glued in sockets - thin tin	none

The experiment determined that Alpha Source's manufacturing more closely matched that of the OEM and provided a more reliable and secure product for use in a Healthcare Facility than its competitors. To request a more in depth copy of this report including photos, please email Alpha Source at [customer.service@alphasource.com](mailto:customer.service@alphasource.com).