

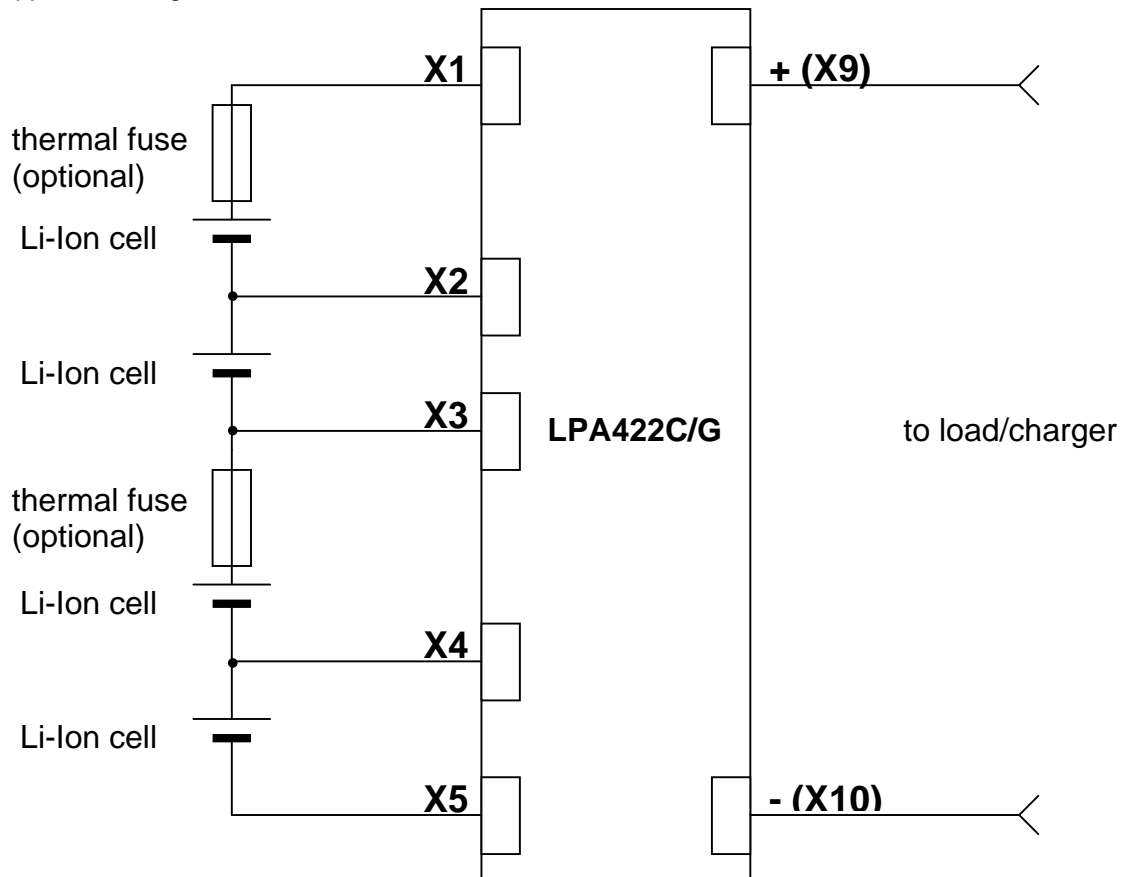
## Specifications Li-Ion pack protector module LPA422C/G-5

The LPA422 is a Li-Ion protection module designed to protect Li-Ion battery packs with three or four cells off overcharge, deep discharge as well as excessive discharge and charge currents. It also includes a simple cell balancing function.

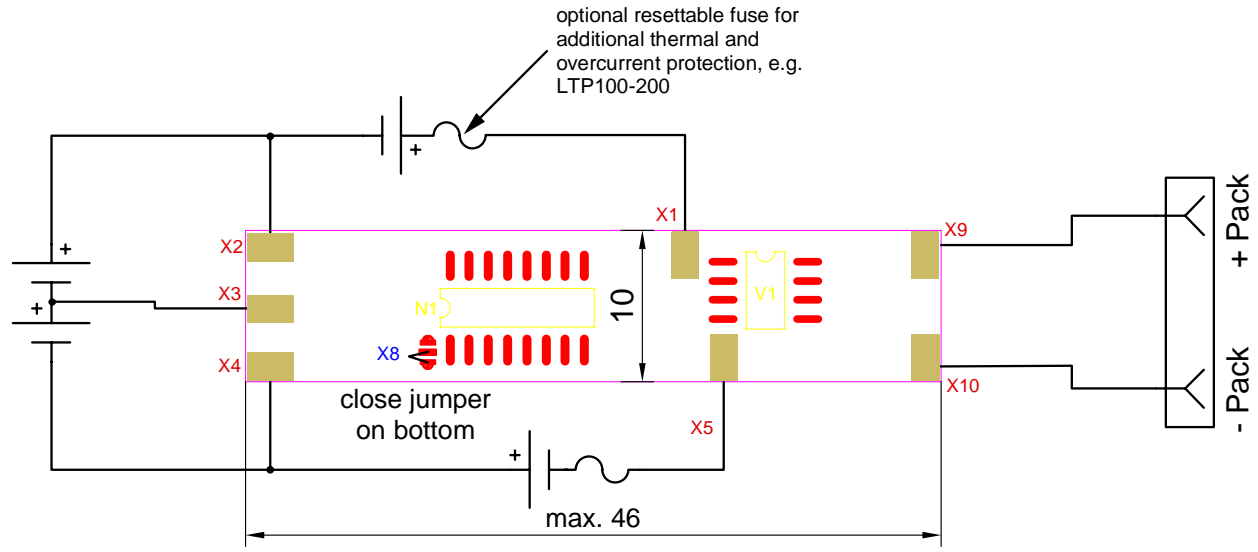
The following specifications apply :

- |                                       |  |
|---------------------------------------|--|
| • Cell type                           | graphite and coke  |
| • Overcharge protection voltage       | version C $4.25 \pm 0.03V$ per cell<br>version G $4.35 \pm 0.03V$ per cell   |
| • Deep discharge detection voltage    | $2.4 \pm 0.1V$ per cell  |
| • Deep discharge release voltage      | $3.0 \pm 0.2V$ per cell  |
| • Max. cont. discharge/charge current | 5A (other values on request), lower at higher temp. !                        |
| • Max. input voltage                  | 18V  |
| • Overcurrent protection delay        | 8...60ms factory settable (60ms default)                                     |
| • Short circuit protection delay      | $300 \pm 150\mu s$   |
| • Deep discharge protection delay     | about 25ms   |
| • Overcharge protection delay         | about 25ms   |
| • Bleeding current                    | 0...9mA ( $6 \pm 3mA$ standard)  |
| • Max. current consumption, active    | $30\mu A$  |
| • Max. current consumption, sleep     | $5\mu A$ , at $V_{bat} < 2.4V$   |
| • Max. dimension                      | 46mm x 10mm x 3.9mm (LxWxH), 3.2mm height on request, other sizes on request |

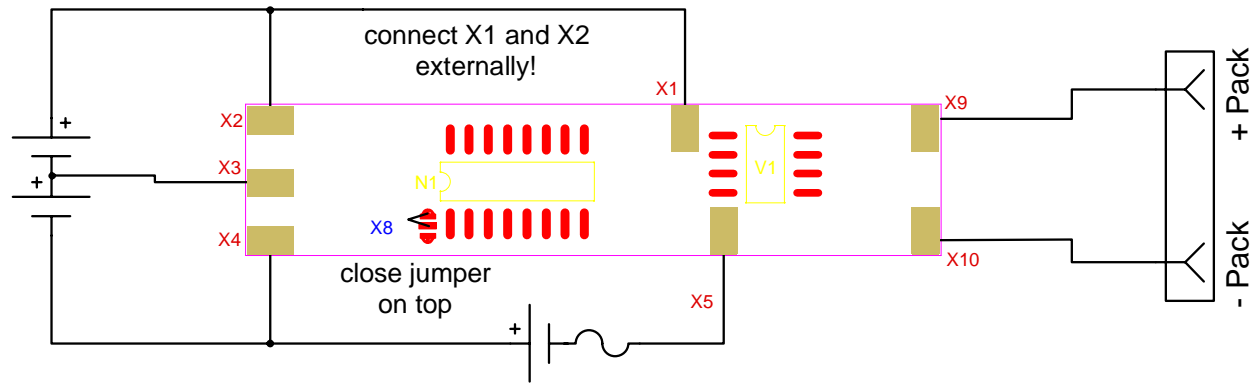
Application diagram



4-Cell configuration



3-Cell configuration



				unspecified tolerances according ISO 2768m	all dimensions in mm		
					scale 2:1	callisto electronics Ltd.	
rev.	comment	date	sign.	drawn	date	sign.	drawing name <b>LPA422 connection diagram, mechanical outline, jumper settings</b>
				check.		LS	
				appr.			
				material		drawing number	page 1
						<b>MOD.LPA422.1</b>	of 1
						replaced by	replacement date