**Denchi Begins Volume Production of Game-Changing Battery Solution for Military Deployment**

*Providing integration, lifespan & overall cost benefits by migrating to Li-Ion technology*

**12th February 2020 –** The Denchi Group continues to expand its portfolio of advanced energy storage solutions for the most challenging application environments. After completing extensive and rigorous field trials with certain key customers over the last 12 months, the company has now announced full availability of its 430935 6T series. Supplied in a NATO 6T format (with 269mm x 256mm x 230mm dimensions), the new rechargeable batteries are based on a Li-Ion chemistry and have built-in charging electronics. The elevated power density levels achieved make these units highly optimized for situations where there are size, weight and power (SWaP) constraints to take into consideration.

For employment predominantly in lighting and ignition tasks, Denchi’s 6T Li-Ion batteries are suited to incorporation into a wide variety of military ground vehicles - from main battle tanks (MBTs) right through to armoured personnel carriers (APCs) and light armoured vehicles (LAVs). They can also be used in ‘silent watch’ mode to power electronic sights and communications equipment when the vehicle engine is turned off (something which is not possible with the conventional lead-acid batteries normally utilized by the military). These units are capable of delivering a maximum continuous discharge current of 350A, but are of particular value when intense power bursts are required (delivering a 30sec pulse of 1100A).

The integrated charger electronics represents a major advantage. Whereas other solutions do not have this, which makes them much harder to retrofit into existing designs. A broad input voltage range can be dealt with (going all the way up to 35V). There is the capability for constituent cells to each be charged directly (thus dramatically shortening charge times) with the current being raised from 45A to 270A (and the sinking of a 500A pulse for a 5sec period being possible). Over-/under-voltage, over-current and over-temperature protection mechanisms are included as part of the sophisticated battery management system, as well as self-balancing in order to combat individual cell aging. In addition, easy to read indicators on the exterior of these batteries mean that all essential status information can be quickly accessed.

Offering a simple drop-in replacement for lead-acid batteries in 24V systems, the Denchi 6T products allow two 40kg units placed in series (making up 80kg in total) to be substituted by a single much lighter unit (weighing only 25kg), resulting in a considerable weight reduction. They will support over 4,000 recharge cycles - an order of magnitude more than equivalent lead-acid batteries (and substantially better than competing Li-Ion solutions too), thereby markedly lowering the total cost of ownership and alleviating the related procurement effort. The time taken to fit them is also significantly shorter.

Housed within a rugged yet lightweight aluminium casing, Denchi 6T batteries achieve industry-leading operational longevity even when subject to extreme conditions. They have already be been extensively tested on British army vehicles. Their working temperature range spans from -40°C to +60°C. Thanks to internal heaters, use of cold start kits to be avoided. For more details on these batteries visit: <https://www.denchipower.com/catalog-2/i9181dup1/6T-Lithiumion-Battery>

**About Denchi Group**

Drawing on decades of engineering heritage, Denchi Group is a respected technology leader in the development and production of high-reliability batteries and their accompanying power management systems. Utilising various different battery chemistries (both primary and secondary), the company’s robust solutions all push the performance envelope and are capable of addressing a broad spectrum of application segments. Among the most prominent of these are military, industrial, renewables, oil/gas, avionics, medical, transportation and enterprise energy storage/back-up power. Benefiting from unmatched in-house engineering proficiency, Denchi’s expanding portfolio of cutting-edge off-the-shelf products, is complemented by highly-optimised custom-built ones.

To find out more please visit: <https://www.denchigroup.com>

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