

## S-Force - the Ultimate Performer

ebm-papst St Georgen have developed the ultimate performer in compact fan technology - S-Force. ebm-papst has developed a new technology of compact fans with:

- Superior air flow
- Steep pressure curves
- Superb efficiency
- Silent commutation
- Strong design



**S-Force gives the highest performance**

**S-Force gives the highest flexibility**

**S-Force is the best technology**

In the telecommunications and electronics markets sectors, existing components are being replaced with new, more powerful compact TCA standard devices (Telecom Computing Architecture) at an alarming rate.

The low construction volume of these components allows the flexible, modular upgrade or conversion of base stations such as mobile networks to fulfil market requirements. However, the flexibility of dividing components comes at a price: the heat generated by the modules must be dissipated reliably and consistently in the long term. The quantity of heat and the flow resistance for the cooling air fluctuate depending on the nature of the modular components.



**The new S-Force air concept for compact, flexible modular systems was specially developed to reliably fulfil these requirements.**

The following design factors were decisive in the development of S-Force.

- Increased power leading to improved aerodynamics. Higher speeds, operating noise and above all the improvements in pressure increase all are new features.
- Reduction of noise through finite element analysis leading to reinforcements, the use of new blade design incorporating winglets and the optimization of materials.
- New stronger bearing had to be designed to make them more durable and efficient at higher speeds in order to transfer the extra power to the air. Specific materials and special lubricants contributed to the success of the new design.

**In summary**, ebm-papst engineering teams are working with telecoms and electronics companies in both Australia and New Zealand to improve their engineered systems. In developing S-Force fans we have enabled these companies to build more complex and space efficient and cost efficient units allowing them to compete aggressively on global markets.

[Find out more about the S-Force range on our website.](#)

