

Panasonic recommends Windows 8 Pro.

**Panasonic**



# RELIABLE VEHICLE DIAGNOSTICS FOR WINNING RESULTS

IN THE WORKSHOP AND ON THE TRACK:  
TOUGHBOOK CF-D1 IN USE AT KTM

A renowned manufacturer of road and racing vehicles such as KTM places the highest demands on both its performance and the equipment it uses. Whether in vehicle development, in workshops around the world or at the race track, man and machine have to meet many challenges in order to successfully and reliably deliver the best results. Consequently, the Austrian company has earned more than 200 world championship titles in motorsport, supported by Panasonic Toughbook mobile computers.

**KTM**

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## THE PANASONIC TOUGHBOOK CF-D1 AT KTM

### Outstanding technology for global success

The KTM-Sportmotorcycle AG, based in Mattighofen, Austria, develops and produces ready to race off-road and street motorcycles. The KTM products are distributed through 23 distribution companies and two joint venture companies in Dubai and New Zealand and worldwide to approximately 1,100 independent dealers and importers.

As a world leader in the off-road segment, KTM Competition began to develop and produce road bikes in 1994. Since then, it has developed and manufactured vehicles under its KTM-Sportmotorcycle AG and HUSABERG brands, entering the super sports car market in 2008 with the X-Bow. It will expand its street motorcycle range further with the development of the new, small-engined KTM 125 Duke, produced in conjunction with Bajaj Auto Ltd.

Racing has always been at the centre of the brand, which more than 200 world championship titles impressively demonstrate. This offers the ideal environment in which to test and develop the latest materials and technological developments, under the most demanding conditions. In line with the company's motto "Ready to Race", the insights gained in motorsport are transferred directly into serial production.

From the materials and technology it uses, KTM expects nothing less than the best - whether that's in development within partner workshops or especially on the track, where even the smallest improvement can make the difference between winning and losing a title. As such, for the most accurate vehicle diagnostics KTM uses a complete software solution from AVL Ditest, a scan box for connection to the vehicle and the Toughbook CF-D1, a fully rugged PC in tablet form factor. Worldwide partners, workshops and race teams are equipped with this solution in order to obtain consistent and reliable evaluations and diagnostics.

### A specialist tool for specialist situations

So far, the KTM diagnostics software was individually distributed to approximately 1,100 worldwide partners and workshops, with different hardware configurations creating complications. Additionally, although the software updates were regularly offered, the KTM headquarters could not ensure or verify that the workshops had installed them. "In support cases we could only discover whether the latest version of our software was being used," describes Andreas Breit, responsible for the diagnostic system at KTM. Based on this experience, a standardized solution was offered, with a comprehensive hardware platform for next-generation diagnostics. A built-in CF-D1 incremental update mechanism now automatically ensures that all contractors are working with the same software version worldwide.

With Panasonic Toughbook, KTM already had a positive experience prior to the introduction of the CF-D1. Since 2008, the Toughbook CF-19 has been used in development environments. "We have looked at other products, but fairly quickly realized that for us, only Panasonic comes into question," says Andreas Breit. "The quality is critical for us and here the Toughbooks are simply outstanding."

KTM makes special demands on the computer solutions it uses, so any technology without robust properties was not an option. "A normal laptop is not suitable for the workshop. Computers are used as a tool and are sometimes subject to dust or shock-impacts from drops or bumps," Andreas Breit says. "Outside, the display must be easy to read even in direct sunlight. When it comes to the race track, considerable dust and moisture are added to the challenge, because our bikes compete mainly in the field."

The development of vehicle technology also creates a greater need for motorcycle diagnostics. Whilst with previous models, a maximum of two control devices were available and brake and engine diagnostics were performed, new models such as the KTM 1190 Adventure have additional options: the vehicle control unit (MCU), Electronic Damping System (EDS), electronic immobilizer (EWS), traction control (MTC), a quickshifter and a tyre pressure monitoring system (TPMS). Each gives the rider greater reassurance, but the technicians have to be trained, which requires an understanding of the diagnostic solution.

### Outstanding service and low total cost

The service itself shows the good customer focus of Panasonic. "The cooperation is very straightforward and positive," Andreas Breit summarizes. "We have developed a workflow at KTM, just in case a device should fail. In that case, we send the workshop or the partner a Toughbook from our equipment pool and pass the defective unit on to Panasonic. Due to the fast response time and low failure rate, we expect less downtime and greater efficiency. Through the combination of reliability and great customer service we benefit from lower total cost of ownership (TCO).

A further expansion of the KTM dealer network and more comprehensive roll-out of the Panasonic Toughbook devices to workshops and partners are planned for the future. The long-term goal is to establish the diagnostic solution in all KTM workshops around the world. And Andreas Breit has no doubt about Panasonic's support in this initiative: "We are completely convinced by Panasonic's total package of robust features, good value for money and quality."

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