

TRANSPORTATION & LOGISTICS

# Botek

Getac's F110 Fully Rugged Tablets Keep Botek's RFID Bin Management Solutions Operating at Peak Efficiency, Whatever the Weather

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# / Challenge /

The waste management industry presents an extremely challenging environment for IT solutions. Devices used as part of Botek's in-vehicle RFID bin management solutions must be able to operate in extreme weather/temperature conditions, as well as survive regular knocks, drops, spills and constant vibrations.

# / Solution /

Getac's F110 fully rugged tablet, Havis secure vehicle dock and Getac 11-16V, 22-32V DC vehicle adapter deliver the ultimate combination of rugged reliability, powerful functionality and intuitive usability. Furthermore, Getac's short lead times means Botek can get new devices into the hands of customers quickly and efficiently, whenever required.

# / Benefits /

Botek has over 900 F110s in use today as part of its solutions, many of which have been in constant use since as far back as 2014. With device lifespans lasting as long as the refuse trucks they are installed in, return on investment (ROI) is extremely high for Botek and its customers, a win-win for both parties.

#### / Botek /

"In an industry like waste management, customers value reliability above all else. Come rain or shine, they just need things to work. Getac's devices are unmatched in their ability to thrive where most others struggle to survive, delivering full ROI within less than a year. With Getac at the heart of our solution we sleep very well at night."



Getac F110 Fully Rugged Tablet

Martin Abelson, Botek

## / Challenge /

Botek develops, manufactures and supplies on-vehicle weighing scales and systems for the Nordic waste management industry. Headquartered in Ulricehamn, Sweden, the company specialises in vehicle-mounted RFID bin management solutions that utilise the power of RFID to identify and track waste bin collections.

When refuse trucks empty a bin, the solution reads the bin's RFID tag and measures/logs the weight of the refuse within it, enabling service providers to accurately bill the municipality they're working for according to the exact amount of waste collected. All of Botek's vehicle-mounted solutions are powered by a mobile IT device, which is mounted in-cabin and used to run driver software, as well as transmit data back and forth between the vehicle and the waste removal service provider's offices.

Refuse collection is an extremely physical work environment, which means devices must be able to withstand a huge amount of punishment, ranging from drops, knocks and spills to vibrations generated by the vehicle's engine and rough road surfaces. The devices must also cope with diverse weather conditions and temperatures, which can vary from extremely cold (as low as -390 in winter) to extremely hot, depending on the time of year in the Nordics.

"We've experimented with numerous different laptops and tablets for our vehicle-mounted solutions over the years, and encountered all sorts of problems along the way," says Martin Abelson, Botek. "Some provided good functionality but were expensive and broke too easily, while others offered better reliability but were cumbersome and built on technology that was five or six years out of date. We needed a device that offered the best of both worlds in terms of rugged reliability and powerful functionality, allowing our customers to operate as efficiently as possible, regardless of the working conditions faced."

### / Solution /

Following an update to its proprietary technology, Botek decided to invest in a new mobile IT solution to power it. After assessing a wide range of leading rugged solutions, the company quickly identified the Getac F110 fully rugged tablet.

"The F110 combines everything we need into a single device, from high quality, fully rugged design, to powerful processing and a user friendly touchscreen display that can be operated in all weather conditions, even when wearing gloves," said Martin. "Furthermore, Getac can deliver additional devices on a much shorter lead time than many other vendors, meaning we can get them into the hands of our customers quickly, which is a big factor for us."

Alongside the Getac F110, Botek also selected the Havis secure vehicle dock and the Getac 11-16V, 22-32V DC vehicle adapter, ensuring optimal in-vehicle reliability at all times.

"In the past, one of the biggest points of failure was the interface between devices and their docking stations," adds Martin. "The near constant vibrations, challenging weather and rough road surfaces around the Nordics quickly led to connection issues that took the truck out of commission until fixed. Now, the combination of the Getac F110 and Havis secure vehicle docks means our solutions are rock solid in this area, even after many years of constant use."

## / Benefits /

Today, Botek has over 900 Getac F110 fully rugged devices and secure docks installed in refuse trucks across the Nordics, with a further 200 in reserve for when existing customers expand their fleets or new contracts are won. In many cases, the lifespan of the devices has equalled or exceeded that of the trucks they are installed in, delivering powerful ROI for both Botek and its customers.

"Any device failure immediately takes the truck out of commission and if a customer's collection rate drops below 97 percent it quickly starts to cost them thousands of Euros in lost revenue," says Martin. "The Getac F110s we bought as far back as 2014 are still going strong today and this extremely low failure rate gives customers complete confidence. We've since bought hundreds more and it's now the only device we offer as part of our complete solution."

On the rare occasion that an issue does arise, Getac's bumper-to-bumper warranty and fast turnaround time means Botek can have the device repaired and back in-situ extremely fast, less than a week in most cases.

"In an industry like waste management, customers value reliability above all else. Come rain or shine, they just need things to work," concludes Martin. "Sometimes, in an effort to save a small amount of money, customers buy their own consumer devices for the job, which typically last somewhere between two weeks and four months before breaking. Getac's devices are unmatched in their ability to thrive where most others struggle to survive, delivering full ROI within less than a year. With Getac at the heart of our solution we sleep very well at night."

# / BOTEK /

Botek develops, manufactures and supplies mobile weighing solutions for the waste management industry, along with systems for RFID-based collection recording and associated software solutions.

In 1978, Botek's founder Bo Stålhandske installed the first on-board scale on a truck and the company has focussed on mobile weighing systems ever since. Today, Botek has about 30 dedicated employees across its software development, technical development and production departments.

Botek has two subsidiaries, Unisystem AB which develop scales for the marine industry and Elgab AB, which develop RFID technology.

