

**TOUGHPAD**

## The fully-rugged, lightweight FZ-G1 tablet improves efficiency by enabling on-site entry of electronic veterinary records in cowsheds and automatically issuing itemized bills.\*

Located in Nishikan-ku, Niigata – a land of paddy fields and rich rice harvests – Sugimoto Veterinary Clinic is responsible for caring for the health of local livestock, especially cattle. Dr. Keisuke Sugimoto visits the cowsheds to check the veterinary records of each cow on the screen of the fully-rugged and lightweight Toughpad FZ-G1. When each treatment is done, he updates the veterinary records on site. Administrative work has been greatly reduced by this streamlining.



\* Itemized bills are detailed records of treatment charges, required when medical or veterinary institutes issue invoices.

### Local livestock farmers trust Dr. Sugimoto for his on-site treatment of cattle



Dr. Keisuke Sugimoto, Veterinary Surgeon says,  
"The FZ-G1 allows me to complete jobs on site, including data entry to veterinary records, issuing categorized treatment slips, and even entering data for itemized bills."

Located about an hour's drive from the center of Niigata City, Sugimoto Veterinary Clinic is in the expansive rural scenery of Nishikan-ku at the edge of the city.

It was here that, in 2005, after qualifying as a vet and gaining extensive practical experience, Dr. Keisuke Sugimoto opened his clinic to specialize in the care of large animals, especially cattle. In 2010 the base of operations was transferred to his newly built residence. From here, he provides veterinary services to local cattle breeders.

"When I receive emergency calls, I have to get moving right way. In particular, cows tend to calve during the night, so I need to be prepared 24 hours a day," says Dr. Sugimoto.

In a practice that includes 25 cattle breeders, Dr. Sugimoto meets the challenge of managing the health and reproduction of 700 head of cattle. His skill and energy have won the trust and confidence of the local cattle breeders.

## The robust Toughpad withstands the dusty confines of a cowshed

Dr. Sugimoto has long been actively applying IT to his veterinary practice. He developed his own electronic veterinary records system using Microsoft Access, a database management program. Ever seeking a system that is easier to use, and having to respond to regulatory and other changes, he has repeatedly upgraded and revised his set up.

He previously ran his electronic veterinary records system on a standard laptop computer made by another company but, in a number of ways, it did not meet his needs.

“Dust from the hay can fill the air in cowsheds, and there is a high risk of contamination from cow’s blood, urine and manure. It’s a challenging environment. That’s why I used to leave my so-called mobile computer in the car and only use it there - never near the cows. And because the batteries only lasted for about an hour, it was not very practical to use when I was out all day making calls,” says Dr. Sugimoto.

He ended up having to fill in records on site by hand and then enter the data when he returned to the clinic, basically doing the same task twice.

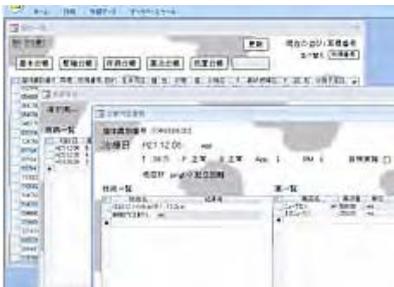
He continues, “Sometimes I couldn’t find the time to enter the data on the same day as the treatment, and the data entry chores piled up. Itemized bills also have to be submitted on a monthly basis. Too often I would find myself working overnight to get the billing done in time.

“Then I found out about the Toughbook CF-H1. When I checked out the specs on the website, I thought, ‘This is great!’ I reckoned it was just the thing for the kind of harsh environment of cowsheds. I decided to go with Toughbook.”



In a cowshed, where the air is often dusty from hay, Dr. Sugimoto enters data in electronic veterinary records with the FZ-G1.

## Electronic veterinary record entries are automatically transformed into treatment slips and itemized bills



Electronic veterinary records displayed on the Toughpad. Without using a keyboard, all information is easily entered from the touch screen. It gets a high score for usability.

In 2009, Dr. Sugimoto deployed the fully-rugged PC, Toughbook CF-H1. In the same year, the National Agricultural Insurance Association changed its Livestock Insurance billing procedures. Now they wanted veterinarians to issue a categorized treatment slip to the farmer upon each treatment. Rather than having to fill in the form by hand, he made the system work for him by accessing the data in the electronic veterinary records to print out the treatment slips.

In 2013, he upgraded the machine to the fully-rugged, compact, and lightweight Toughpad FZ-G1 tablet to further improve efficiency.

For each visit, the first thing is to check, using the FZ-G1, the history of the cows being treated.

Dr. Sugimoto admires the quick and easy method of log-in by tracing his picture password on the screen.

Each cow is assigned a ten-digit ID number, with which items such as date of birth, dates of insemination and delivery, number of births, treatment and reproductive history are recorded. Diagnosis and treatment are carried out in the cowshed while referring to the onscreen



After treating the cows, hard copies of the necessary forms are printed using a portable printer, and handed over to the farmer. Using Bluetooth® connectivity, there's no need for cables.

information.

After a consultation, the electronic veterinary record is updated with the specific treatment provided and the amount and mode of administration of any drugs. Data entry can be performed while waiting for an intravenous drip to finish or while reporting to the farmer in the farm office. All the data-entry procedures can be concluded with very little extra time onsite.

He can easily show the FZ-G1's screen to the farmer, which helps to clearly communicate information when explaining a cow's condition and proposed treatment.

On the spot, data entered into the records can be accessed to generate the categorized treatment slips, and after making hard copies on a portable printer, the official paperwork can be handed over to the farmer. No cables are required: printing is conveniently performed wirelessly using Bluetooth®.

## Smooth data entry via touch screen. Enough battery life for a full day's work.

Besides the convenience of finishing data entry on site, the same data can be accessed to create itemized bills. This means that the need for administrative work after returning to the clinic has been dramatically decreased. Just about all that remains to be done is to back up the data and print out the itemized bills.

One thing has brought particular relief: "I no longer have to stay up all night to get my itemized billing done."

Dr. Sugimoto highly evaluates the usability of the FZ-G1. "Thanks to its fast startup time and quick log-in using my picture password, I can start working immediately upon arriving at the site. Data entry proceeds smoothly using the touch screen. The daylight-readable display is helpful for showing images clearly even in cowsheds where direct sunlight comes in."

Dr. Sugimoto is also pleased not to have to worry about the battery life of the FZ-G1. "The battery of the FZ-G1 lasts a long time. I only have to recharge it every other day based on my daily usage. I usually recharge the battery when the remaining power reaches 40%. A full recharge takes only an hour and half.

"The FZ-G1's main unit supplies power to accessories such as the keyboard connected to the cradle, even when the cradle is not connected to the power supply." Dr. Sugimoto appreciates another advantage of the FZ-G1: "You can avoid forcibly recharging a fully charged battery every time the main unit is connected to the cradle, which I presume prevents deterioration of the battery."



Dirt is easily wiped from the dust- and water-resistant FZ-G1, even after placed directly on the ground.



Back in the clinic, the FZ-G1 is placed in a cradle and used as a desktop computer.

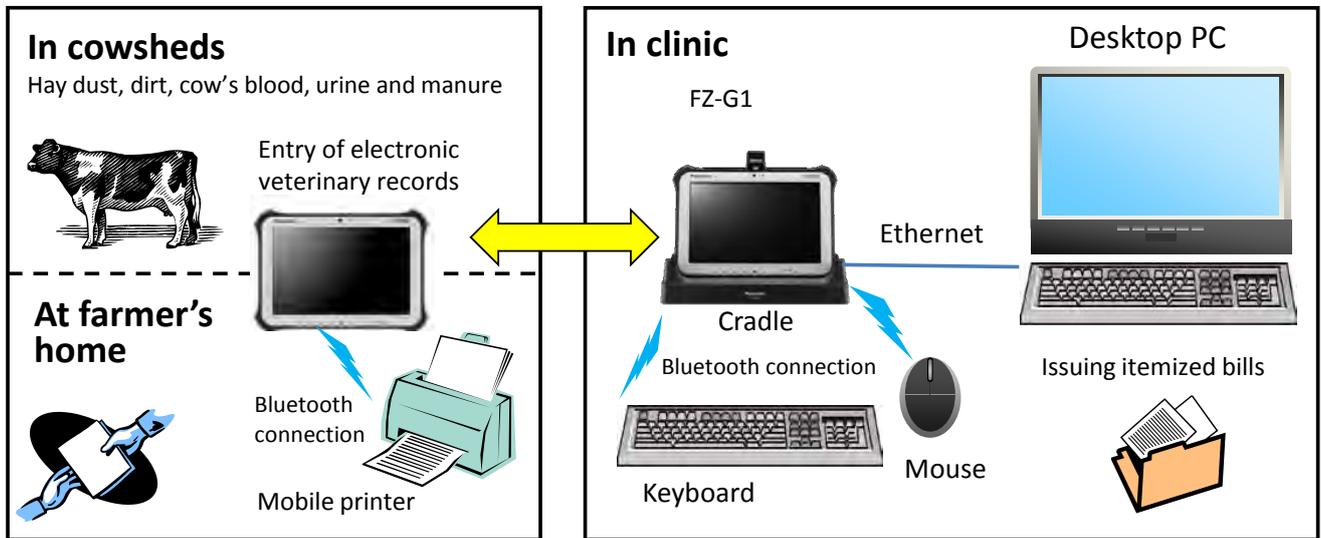
## Systematization streamlines local visiting medical services

Dr. Sugimoto has shown how the FZ-G1 can be used in veterinary practice. This practical know-how can also be employed in community medical services that involve house calls or medical visits.

"If I can get medical equipment capable of wireless connection, it would further reduce the need for input.

Data entry would become even easier and more accurate,” says Dr. Sugimoto.

The wave of IT that is propelling progress in the medical world is also bringing benefits to veterinary practice. Whether providing healthcare to persons or animals, Panasonic’s mobile equipment is indispensable for reducing the risk of error and improving efficiency. It has a promising future as a means to help to streamline healthcare.



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