

# WHITE PAPER TOUCH TECHNOLOGIES

Fujitsu – the leader in pen computing – takes pride in its 18 year history of developing and manufacturing pen-based systems. With the launch of Microsoft® Windows® 7 Fujitsu launched their industry-leading dual digitizer displays, combining best-in-class display technology with all the benefits of Windows® 7.



With its STYLISTIC and LIFEBOOK T series Fujitsu offers an unmatched portfolio of pen based systems. Working with pen based systems not only provides a totally intuitive and smooth data input with the pen (or stylus) or fingers directly on the display, it also offers your customers a large number of opportunities to optimize and ease their processes.

The following white paper explains the available digitizer technologies and will help you to choose the right display for your area of application.

## Introduction

To work while standing or walking is a permanent request of customers in

- Healthcare
  - Edit patient data on the bedside; mobile doctor's round
- CRM / Sales Automation
  - Administer customer data at the customer's site
- Field Service Operation o Fill out sheets & forms
- Insurance
  - Collect & structure data at the customer's place
- Market Survey
  - Collect and transfer data immediately
- Utilities and Maintenance
  - Collect & structure data on site
- Transportation
  - Route & freight planning on the move
- Logistics
  - o Record goods or cargo on the move
- Food industry
  POS administration

and in many other business segments.

These people are looking for a device giving them the opportunity of paperless work to optimize their working processes, increase productivity and reduce costs

They would like to have a device, powerful as a notebook and easy to use like a conventional notepad.

For the time being, there are several digitizer technologies in our portfolio, which all provide pen or touch input, but with different features and also limitations.

## **DIGITIZER TECHNOLOGIES**

**RESISTIVE DIGITIZER TECHNOLOGY** (also called passive digitizer or passive touch) (LIFEBOOK T1010)

A resistive touch panel is made by sandwiching together ITO (Indium Tin Oxide) coated glass and PET (Poly Ethylene Terephthalate). The glass is for mechanical stability and the PET provides the flexible medium through which the two parts connect. Microdot spacers separate the layers to avoid accidental input. The microdot spacers are printed onto the glass by a proprietary process, which allows precise control over dot size, height and density. Dot density determines the operation method from low density finger to higher density pen-operation panels. A slight positive air pressure in-between the layers and a sealed construction prevents dirt and dust from entering the panel.

Advantages: Finger touch Disadvantages: No palm rejection, low accuracy

ACTIVE DIGITIZER TECHNOLOGY (also called active pen technology) (LIFEBOOK T5010; STYLISTIC ST6012)

The active digitizer is based on electromagnetic resonance technology (EMR) and allows convenient working under extreme conditions. Even though in a ruggedized case, the user is able to use the natural pen interface. The digitizer allows both hovering and variable pressure effects for smooth inking, increasing the overall user experience. Configurable extra buttons are one of many small but helpful features.

Advantages: Highest accuracy, pressure sensitivity, electronic rubber-, left- & right mouse button functionality Disadvantages: No finger touch, special pen is required

### DUAL DIGITIZER TECHNOLOGY

(LIFEBOOK T5010 with Dual Digitizer; LIFEBOOK T4310; LIFEBOOK T4410)

Our dual digitizer technology combines a touch screen and active digitizer technology to benefit from the advantages of both.

Technically this means, the touch screen is combined with an active digitizer. This offers the user the comfort, to work with both, pen and finger, but also eliminates several disadvantages of both technologies.

Systems with Dual Digitizer display are capable of multiple touch with Windows\* 7.

Advantages: Highest accuracy, pressure sensitivity, electronic rubber-, left- & right mouse button functionality, finger and gesture touch

# Multiple Touch

Multiple touch refers to a hard- and software based technology, which enables the user to use more than one finger - even two finger gestures are supported. Gestures are e.g. tap, double-tap, drag, scroll, zoom, rotate, flick, press-and-hold. When working with the pen, you can also define line thickness with the pressure of the pen – light pressure means thin line, high pressure means a thick line.



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