E-Paper displays

Maximum performance with minimum power consumption

Discover the impressive advantages
of E-Paper technology

E-Paper displays are based on the principle of bistability, which means they only consume power when the image content changes. The technology is ideal for applications where image content remains static over long periods of time and and does not need to be updated frequently. E-Paper displays are extremely energy-efficient and ideal for continous operation.
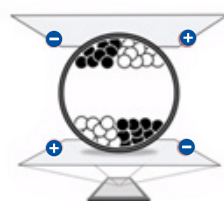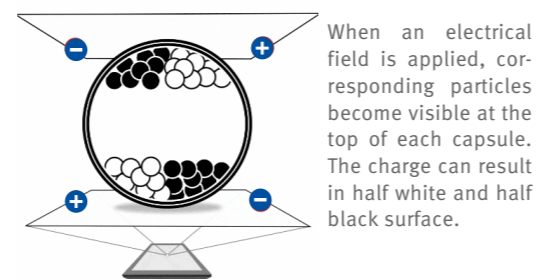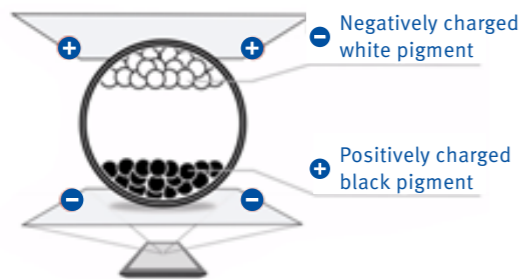
Another major advantage is that they are reflective displays and thus do not require additional lighting as long as ambient light is available. Even in direct sunlight outdoors, E-Paper displays offer impressive readability and an extremely wide viewing angle. These features make them an excellent choice for demanding applications in various fields.
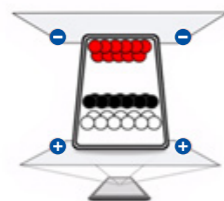
We offer numerous value-added options:

> Front lighting options for applications that require additional brightness
> Optical bonding to improve optical performance
> PCAP solutions for simple and user-friendly operation
> Customized driving solutions
> Content management support
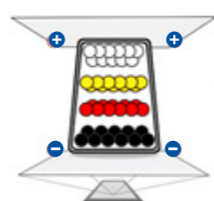> Individual integration concepts

E-Paper display
technology

Electronic ink is made of millions tiny mircocapsules. Each capsule contains charged black and white ink particles suspended in a clear fluid.

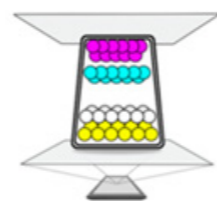- Negatively charged white pigment
- Positively charged black pigment

When an electrical field is applied, corresponding particles become visible at the top of each capsule. The charge can result in half white and half black surface.

| 2 particle | 3 particle | 4 particle | Advanced Colour E-Paper (ACeP ™) |

Product overview
E-Paper portfolio

Diagonal	‹ 1” to 42”
Structure	Standard or flexible E-Paper
Colours	Monochrome, 3-, 4-, 7-colours up to full-colour (max. 65,000 colours)
Scope of services	E-Paper displays up to the finished monitor

Possible applications
for E-Paper displays

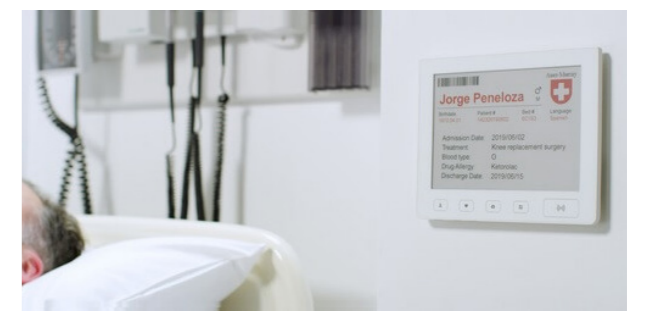Smart Retail

Smart City & Signage

Smart Logistics, Factory & Office

Smart Hospital & Medical

Future priorities:

> Improved colours
> Extended operating temperature range
> Faster switching characteristics

DATA MODUL is looking to accompany you on the exciting journey in bringing E-Paper-Displays into many more applications.

Advantages
at a glance

Sunlight readable

easy on the eyes (compared to TFTs no light emission)

24/7 365
always on

Wide viewing angle

Extremely low power consumption

crispy images similar to printed paper

For more information, contact your DATA MODUL sales partner or visit our website:

www.data-modul.com/en/products/distribution/displays/display-technologies/epaper-technology

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DISPLAY **TOUCH** **EMBEDDED** **SYSTEMS**

As a leading expert in the field of industrial display, touch and embedded technologies we design, develop and manufacture tailor-made system solutions at the highest level.