


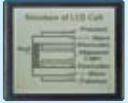






Technical solutions of the highest level

Data Modul offers customized solutions for LC glasses and LC modules. We combine more than 30 years of experience as well as technical know how and competence with the experience of leading manufacturers. The results are technical solutions of the highest level. All basic data can be specified according to customer requests which guarantees the ideal integration of the LC module into a company's application. Data Modul guides the customer through all necessary steps beginning at the design over development and production of a display.

LCD technologies

	Technology	Dot color / Background	Features
	TN, HTN, IBN	black / gray optional other	<ul style="list-style-type: none"> • TN (Twisted Nematic) / HTN (Higher Twisted Nematic) is the most cost-effective technology • IBN Improved Black Nematic (ultra high contrast) • suitable for static and low multiplex driving • twisting of molecules is 90° / 110°
	STN / grey silver blue	dark blue / yellow green	<ul style="list-style-type: none"> • STN (Super Twisted Nematic) twisting angle up to 270° which gives almost ideal steepness of the characteristic optoelectronic curves • improvement of the viewing angle • refer to page 13 for detailed information
	FSTN	black / white	<ul style="list-style-type: none"> • FSTN (Film Super Twisted Nematic) • high-contrast black and white representation by utilization of a decelerating film • more cost-effective, lighter and flatter than DSTN
	DSTN	black / white	<ul style="list-style-type: none"> • DSTN (Double Super Twisted Nematic) • high-contrast black and white representation by utilization of an additional compensation cell
	FFSTN / ISTN	black / white negative	<ul style="list-style-type: none"> • FFSTN (Double Film Super Twisted Nematic/Intelligent STN) • high-contrast black and white negative mode display • optimal performance with white or multi color backlights • more cost-effective, lighter and flatter than DSTN • ISTN for best contrast through the whole temp. range
	CSTN	color	<ul style="list-style-type: none"> • FSTN with color filter mask (passive matrix) • passive driven dot matrix • white LED or CCFL illumination
	TFT	black / white colored	<ul style="list-style-type: none"> • TFT (Thin Film Transistor) • active driven dot matrix • very wide viewing angle • color or monochrome display • white LED or CCFL illumination
	ZBD / BCD	black / white colored	<ul style="list-style-type: none"> • enormous power saving bistable technology • power only required for image updates • images do not degrade • high contrast, wide viewing angle