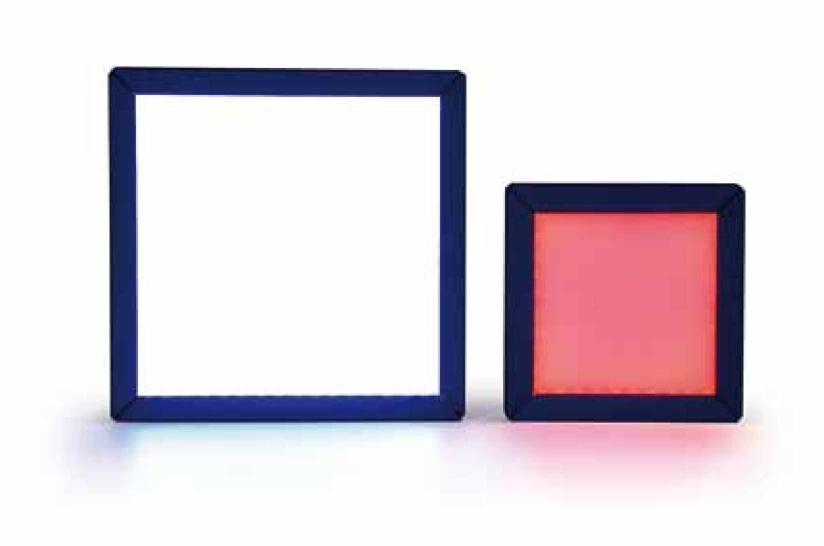
OPTO ENGINEERING
THE TELECENTRIC COMPANY

LTBK SERIES

Back light led illuminators



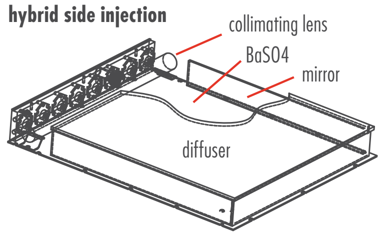
Our **LTBK Series** Back Ligth illuminators feature two kinds of light side injection techniques:

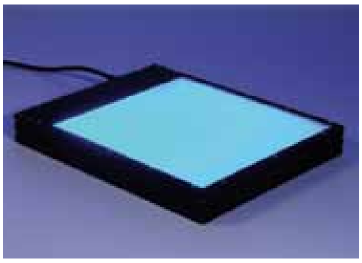
- **standard side injection:** LED light is injected into all sides of an optical waveguide which progressively diffuses the radiation. Besides proving very efficient, these illuminators are also cost-effective.
- **hybrid side injection:** LED light is pre-collimated and injected into a hollow lightguide whose sides are mirrored and whose base is Barium Sulfide painted, while the output window is made of ground optical glass. Hybrid Type back light illuminators ensure **much higher optical throughput** and excellent **luminance homogeneity** (up to less than 5% inhomogeneity).

This series also features UV and IR Hybrid Side Injection versions, providing maximum optical transmission and optimum illumination homogeneity thanks to the integration of **optical grade glass** elements, such as cylindrical lenses, mirrors and diffusers.

part number	light	dimensions				power rating		compatible TC lenses
	colour, peak wavelength	active area (mm x mm)	length (mm)	width (mm)	height (mm)	voltage (V, DC)	power (watt)	(FOV fitting active area)
VIS STANDARD SIDE INJECTION VIS BACK-LIGHT ILLUMINATORS								
LT BK 36/R	red, 625nm	58 x 58	78,5	78,5	15	24	6	TCxx24, TCxx36, TCxx48, TCxx56
LT BK 36/W	white, 6300K	58 x 58	78,5	78,5	15	24	3	TCxx24, TCxx36, TCxx48, TCxx56
LT BK 64/R	red, 625nm	98 x 98	115,5	115,5	14	24	12	TCxx56, TCxx64, TCxx80, TCxx96
LT BK 64/W	white, 6300K	98 x 98	115,5	115,5	14	24	6	TCxx56, TCxx64, TCxx80, TCxx96
VIS HYBRID SIDE INJECTION VIS BACK-LIGHT ILLUMINATORS								
LT BK 48/R	red, 625nm	67 x 67	121	81,5	30	24	9	TCxx36, TCxx48, TCxx56, TCxx64
LT BK 48/G	green, 527nm	67 x 67	121	81,5	30	24	8	TCxx36, TCxx48, TCxx56, TCxx64
LT BK 48/B	blue, 460nm	67 x 67	121	81,5	30	24	7	TCxx36, TCxx48, TCxx56, TCxx64
LT BK 48/W	white, 6300K	67 x 67	121	81,5	30	24	10	TCxx36, TCxx48, TCxx56, TCxx64
LT BK 80/R	red, 625nm	106 x 106	160	120	30	24	9	TCxx72, TCxx80, TCxx85, TCxx96
LT BK 80/G	green, 527nm	106 x 106	160	120	30	24	8	TCxx72, TCxx80, TCxx85, TCxx96
LT BK 80/B	blue, 460nm	106 x 106	160	120	30	24	7	TCxx72, TCxx80, TCxx85, TCxx96
LT BK 80/W	white, 6300K	106 x 106	160	120	30	24	10	TCxx72, TCxx80, TCxx85, TCxx96
LT BK 192/R	red, 625nm	193 x 193	249	209	98	24	18	TCxx120, TCxx144, TCxx172, TCxx192
LT BK 192/G	green, 527nm	193 x 193	249	209	98	24	18	TCxx120, TCxx144, TCxx172, TCxx192
LT BK 192/B	blue, 460nm	193 x 193	249	209	98	24	15	TCxx120, TCxx144, TCxx172, TCxx192
LT BK 192/W	white, 6300K	193 x 193	249	209	98	24	20	TCxx120, TCxx144, TCxx172, TCxx192
UV HYBRID SIDE INJECTION UV BACK-LIGHT ILLUMINATORS								
LT BK 48/UV365	UV, 365 nm	67 x 67	121	81,5	30	24	8	TCUVxx36, TCUVxx48, TCUVxx56
LT BK 48/UV385	UV, 385 nm	67 x 67	121	81,5	30	24	8	TCUVxx36, TCUVxx48, TCUVxx56
LT BK 48/UV405	UV, 405 nm	67 x 67	121	81,5	30	24	8	TCUVxx36, TCUVxx48, TCUVxx56
LT BK 80/UV365	UV, 365 nm	106 x 106	160	120	30	24	8	TC xx64, TC xx80
LT BK 80/UV385	UV, 385 nm	106 x 106	160	120	30	24	8	TC xx64, TC xx80
LT BK 80/UV405	UV, 405 nm	106 x 106	160	120	30	24	8	TC xx64, TC xx80
LT BK 192/UV365	UV, 365 nm	193 x 193	249	209	30	24	16	
LT BK 192/UV385	UV, 385 nm	193 x 193	249	209	30	24	16	
LT BK 192/UV405	UV, 405 nm	193 x 193	249	209	30	24	16	
IR HYBRID SIDE INJECTION IR BACK-LIGHT ILLUMINATORS								
LT BK 48/IR890	IR, 890 nm	67 x 67	121	81,5	30	24	8	TCxx36, TCxx48, TCxx56, TCxx64
LT BK 48/IR940	IR, 940 nm	67 x 67	121	81,5	30	24	8	TCxx36, TCxx48, TCxx56, TCxx64
LT BK 80/IR890	IR, 890 nm	106 x 106	160	120	30	24	8	TCxx72, TCxx80, TCxx85, TCxx96
LT BK 80/IR940	IR, 940 nm	106 x 106	160	120	30	24	8	TCxx72, TCxx80, TCxx85, TCxx96
LT BK 192/IR890	IR, 890 nm	193 x 193	249	209	30	24	16	TCxx120, TCxx144, TCxx172, TCxx192
LT BK 192/IR940	IR, 940 nm	193 x 193	249	209	30	24	16	TCxx120, TCxx144, TCxx172, TCxx192

hybrid side injection





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