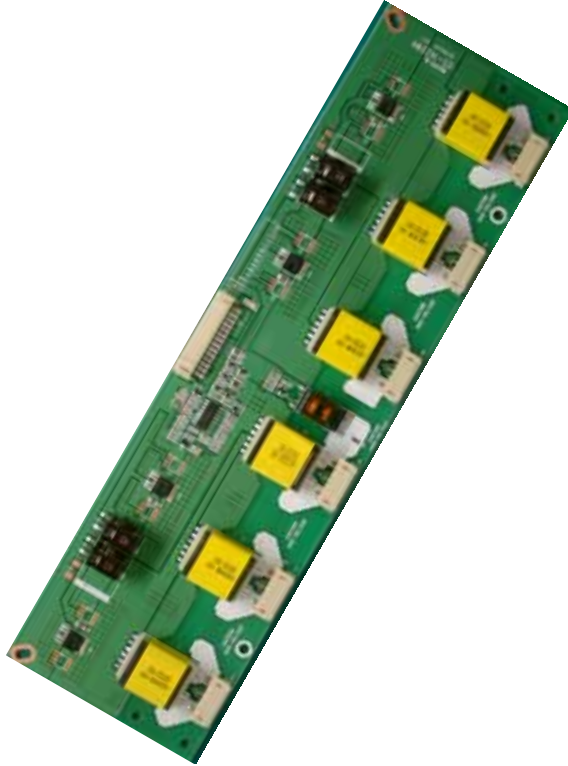


## DS-1422WK(24V)



### Features

- Drive 12-lamps
- 12 straight lamps & 6 C-shape lamps BLU are available
- Nominal current 6.0 mArms for each lamp
- 21.6 to 26.4V input voltage range
- Accurate and stable output current regulation
- All lamp operation frequency synchronized
- Voltage controlled dimming
- External-PWM Dimming control (Option)
- Long lamp life with soft start
- High efficiency
- Low EMI and spurious noise

### Applications

- 20.1~24" high brightness LCD TV & Monitor

### Electrical characteristics

Parameter	Symbol	Conditions*	Specification*			Unit
			Min	Typ	Max	
Input supply voltage	$V_{IN}$		21.6	24.0	26.4	V
Input current	$I_{IN}$	$V_{IN}=24V, V_{BRT}=0V$	3.0	3.5	4.0	A
Full bright lamp current	$I_{O(MAX)}$	$V_{IN}=24V, V_{BRT}=0V$	5.0	6.0	7.0	mArms
Minimum lamp current	$I_{O(MIN)}$	$V_{IN}=24V, V_{BRT}=5.0V$	2.0	3.0	4.0	mArms
Operating frequency	$F_O$	$V_{IN}=24V, V_{BRT}=0V$	45	50	55	KHz
Dimming ratio		$V_{IN}=24V, V_{BRT}=0$ to 5.0V		2 : 1		
Striking time		$V_{IN}=24V, V_{BRT}=0$		0.5		sec
Efficiency		$V_{IN}=24V, V_{BRT}=0V$	75	84		%

\* At the reference of 24" LCD-module(LTM240M2-L01) of Samsung

**DS-Plus Inc./ ( )**

Room 403, Ssangyong IT twin tower-1, 442-17 Sangdaewon-dong, Jungwon-gu, Seongnam-city 462-807, Korea  
Tel : 82-31-608-7100~3, Fax : 82-31-608-7104

## Absolute maximum ratings

## DS-1422WK(24V)

Input supply voltage ( $V_{IN}$ )	-----	-0.3V to 26.4V
Output voltage, no load	-----	Internally limited to zero volt
Output current ( $I_O$ )	-----	9.0mA <sub>rms</sub>
Output power (per lamp)	-----	8.0W
Sleep & Bright adjust signal voltage ( $V_{SLEEP}$ , $V_{BRT}$ )	-----	-0.3V to $V_{IN}$
Ambient operating temperature	-----	0 °C to 50 °C
Storage temperature range	-----	-30 °C to 80 °C
Operating & storage humidity	-----	10 % to 85 %

## Recommended operating conditions (R.C.)

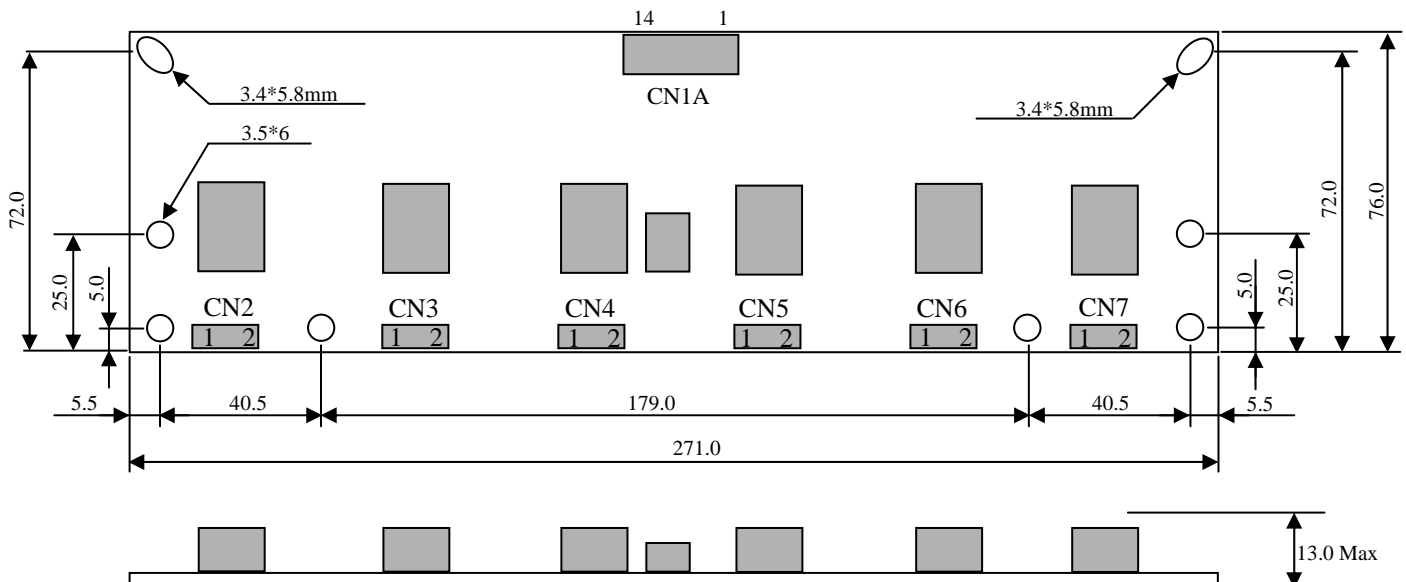
Parameter	Symbol	Recommendation			Units
		Min	R.C.	Max	
Input supply voltage	$V_{IN}$	21.6	24.0	26.4	V
Full bright lamp current	$I_{O(MAX)}$	5.0	6.0	7.0	mA <sub>rms</sub>
Brightness control voltage range	$V_{BRT}$	0		5.0	V
Lamp on/off control voltage	$V_{SLEEP}$	2.0	3.0	5.0	V
Lamp operating voltage(reference)	$V_O$		-		V <sub>rms</sub>
Operating ambient temperature range	$T_A$	0		50	°C

## Functional pin description

CN1 Connector	:	12505WR -15 (YEONHO or Equivalent) or 20022WR -14A00(YEONHO or Equivalent)
CN1 -1,2,3,4,5		$V_{IN}$ (DC Input ; 24.0V)
CN1 -6,7,8,9,10		$G_{ND}$
CN1 -12		$V_{SLEEP}$ (Lamp On/Off control ; Off at Low, On at High)
CN1 -14		External -PWM Dimming control (Option)
CN1 -13		$V_{BRT}$ (Analog Dimming -Bright adjust ; 0 to 5.0V)
CN2~7 Connector	:	20015WR -07L01(YEONHO or Equivalent)
CN2~7 -1,2	:	High voltage

Tolerance : ± 0.5  
Unit : mm

## Mechanical dimensions



Notice : The specification is subject to change without notice