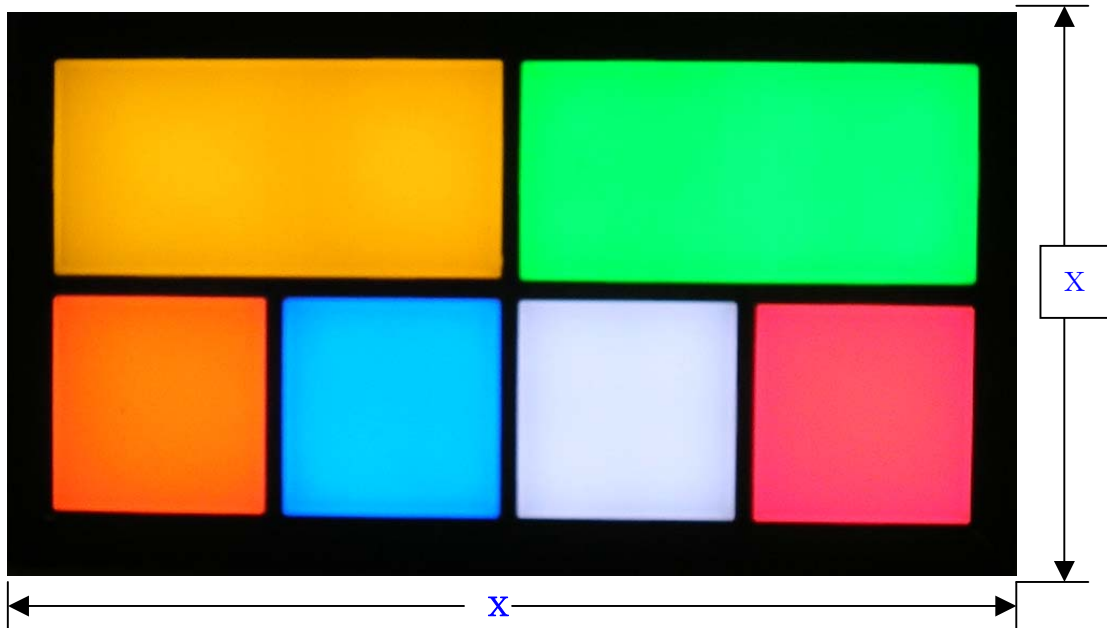
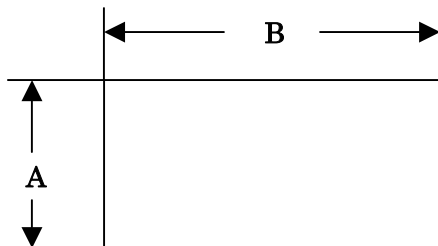




# Display Lights



Panel-cut size (Type S)



Tolerance of panel-cut size : +1.0mm, -0

Window	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20
A	35	65	95	125	155	185	215	245	275	305	336	366	396	426	456	486	516	546	606	606
B	35	65	95	125	155	185	215	245	275	305	336	366	396	426	456	486	516	546	606	606
X	42	72	102	132	162	192	222	252	282	312	342	372	402	432	462	492	522	552	582	612

X : External size

For Types T count 2 S-windows as 1

## Feature

### ☆ **Luminous colors of high brightness**

Brightness is improved by 2 to 8 times.

Seven colors are available. Red, Green, Orange, Milky white, Yellow, Blue,  
Pure white

### ☆ **Maximum number of window panels**

**TP30F** Max 400 windows for Full voltage type ( One side max 1meter)

Max 80 windows for Transformer type

**TP40F** Max 105 windows for Full voltage type ( One side max 1meter)

Max 80 windows for Transformer type

### ☆ **Color/Voltage change is easy with LED products (R/CR partial pressure types)**

You can easily change color and voltage from outside of the window side.

### ☆ **Protection cover of live part is included in standard accessories.**

### ☆ **Depth shortened**

By adopting R/CR partial pressure methods for 100V/200V products, TP30F and TP40F Series have the same depth, which is 2/3 shorter than the old model.

### ☆ **Easy wiring**

Since terminals are placed in checkered lines and there are gaps between windows, a wire is easy to pull out.

A short-circuit plate (2-prong) is included in standard accessories and 3-prong to 6 prong short-circuit plates are available as an optional extra, thus making wiring work easier.

### ☆ **Weight saving**

Lighter in weight by 1/3 from the old model (LED 100V/200V lighting).

### ☆ **Colored lighting without color plate is available for LED type**

When the light is out. Lighting is either colored or milky white, whichever you choose.

### ☆ **TP40F Series is easily changed to tilting window for greater visibility when placed high position.**

Tilting window is available by simply attaching a lens case upside down.

### ☆ **Conformity to the fire laws.** The components of window have oxygen index 26.

## Order Code Composition

# TP30F-04 05-E3-S-O(10)G(10)

①

②

③

④

⑤

⑥

## ① Series

TP30F

TP40F

## ② No of window

Vertical 01~

## ③ No of window

Horizontal 01~

## ④ Voltage

Voltage				
Type		Code		
<b>LED</b>	Full voltage	<b>B3</b>	AC/DC 12V	
		<b>E3</b>	AC/DC 24V	
		<b>F3</b>	AC/DC 48V	
	R partial	<b>H3</b>	AC/DC 100~110V	
	pressure	<b>L3</b>	AC/DC 115~127V	
	CP partial pr	<b>M3</b>	AC/DC 200~220V	
	Transformer	<b>Q3</b>	AC 230~254V	
		<b>S3</b>	AC 350~380V	
		<b>T3</b>	AC 400~440V	
	Composite	<b>X3</b>	Combination	
<b>Incandescent</b>	Full voltage	<b>C</b>	AC/DC 15.5V	
		<b>E</b>	AC/DC 24V	
	Transformer	<b>H</b>	AC 100~110V	
		<b>L</b>	AC 115~127V	
		<b>M</b>	AC 200~220V	
		<b>Q</b>	AC 230~254V	
		<b>S</b>	AC 350~380V	
		<b>T</b>	AC 400~440V	
	Resistance	<b>H6</b>	DC 110V	
		<b>L6</b>	DC 127V	
	Composite	<b>X</b>	Combination	

## ⑤ Window form

Square	
<b>S</b>	TP30F 30 × 30
	TP40F 40 × 40
Rectangular	
<b>T</b>	TP30F 30 × 60
	TP40F 40 × 80

## ⑥ Color designation

<b>R</b>	Red
<b>G</b>	Green
<b>Y</b>	Yellow
<b>O</b>	Orange
<b>W</b>	Milky white
<b>H</b>	Blue
<b>P</b>	Pure white

Pure White is only for LED

Transformer unit	
TP30F / TP40F	
<b>LED Bulb</b>	24V
<b>Incandescent Bulb</b>	
18V	2W

## Order information

For order of TP30F/ TP40F Display lights, please use the designated specification sheet.

● Entry of order code

Refer to the order code composition in earlier pages.

● Count the number of window

The number of window should be counted based on Square (S) window. Convert the window type you order into Square (S) window.

### Examples

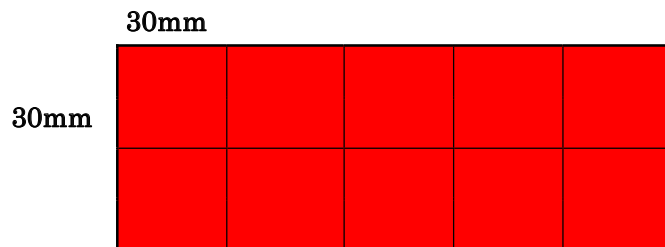
#### Ex.1 TP30F-0205-E3-S-R (10)

Window size :  $30 \times 30$

Voltage : LED 24V

Color : Red for 10 windows

Total window:  $2 \times 10$ (10window)



#### Ex.2 TP40F-0304-Q3-S-Y (8) G(4)

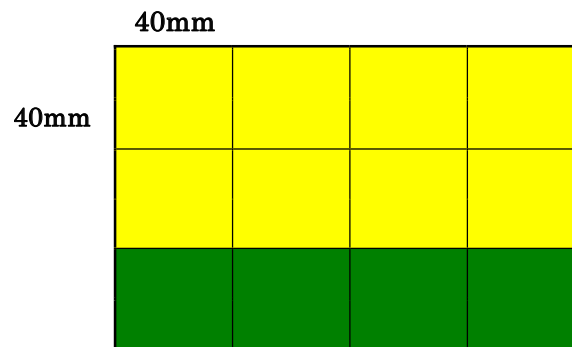
Window size:  $40 \times 40$

Voltage : 240V Transformer

Type : LED

Color : Yellow 8, Green 4

Total window  $3 \times 4$ (12windows)



#### Ex.3 TP30F-0204-E-T-O (4)

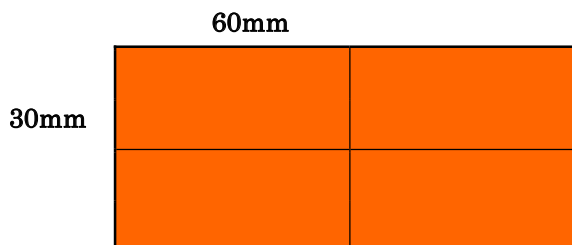
Window size:  $30 \times 60$

Voltage : 24V

Type : Incandescent

Color : Orange 4

Total window  $2 \times 4$ (8windows)



Number here represent **S** window

## Calculation of weight

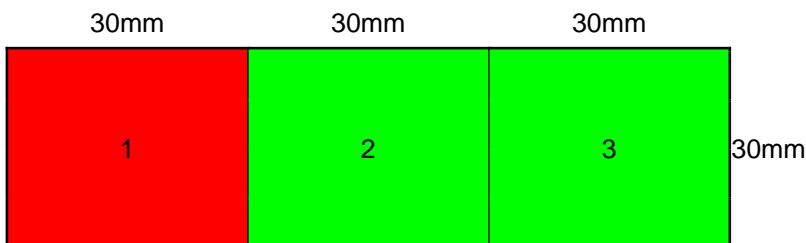
### Formula

$$\text{Total Weight} = \text{Body weight} \times (\# \text{ of vertical} \times \# \text{ of horizontal}) + \text{Side Plate} \times (\# \text{ of vertical} + \# \text{ of horizontal})$$

Light Source	Power Source	TP30F		TP40F	
		Body weight	Side plate	Body weight	Side plate
Incandescent	Full voltage	29g	26g	32g	28g
	Transformer	107g		110g	
LED	Full voltage	29g	26g	38g	28g
	Resistance	32g		42g	
	Transformer	109g		121g	

### Example 1:

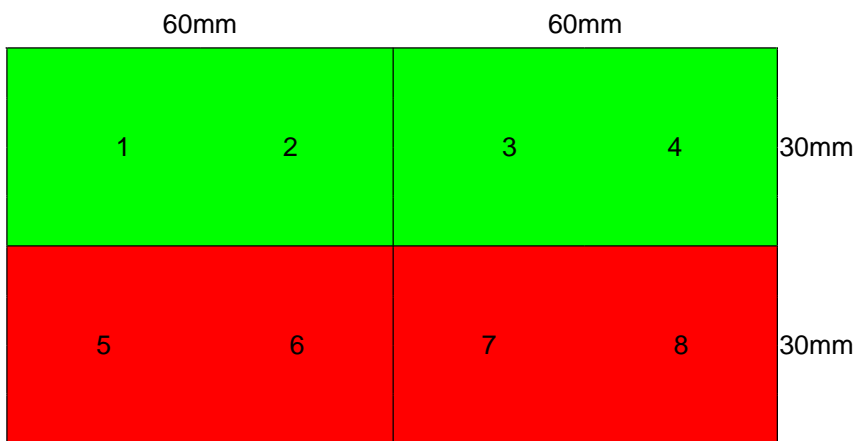
Model	: TP30F-0103-E3-S-R(1)G(2)
Size of windows	: 30mm X 30mm
No. of windows	: 1 X 3 (3 windows)
Color	: 1 Red, 2 Green
Voltage	: AC/DC 24V
Type of Light	: LED FLAT UNIT



**Total Weight = 29 x (1 x 3) + 26 x (1 + 3) = 87 + 104 = 191g**

### Example 2:

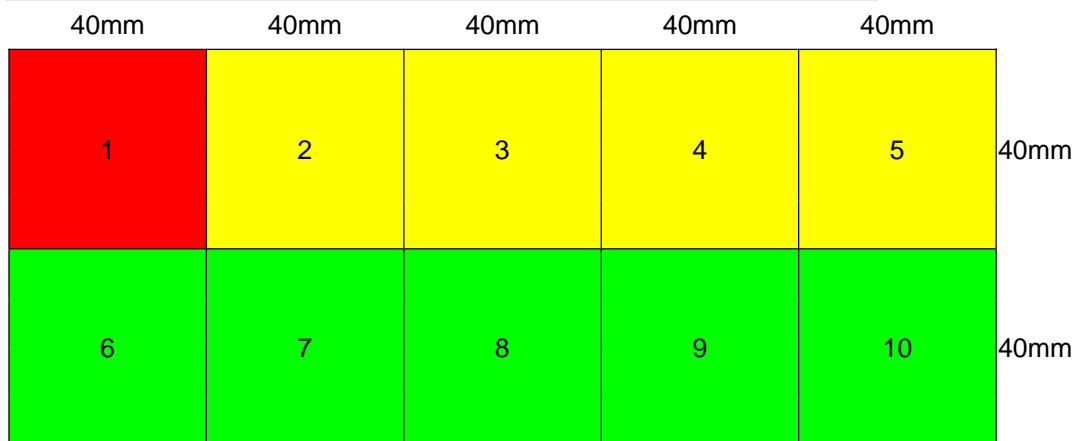
Model	: TP30F-0204-M-T-R(2)G(2)
Size of windows	: 30mm X 60mm
No. of windows	: 2 X 2 (4 windows)
Color	: 2 Red, 2 Green
Voltage	: AC200-220V
Type of Light	: Incandescent



$$\text{Total Weight} = 29 \times (2 \times 4) + 26 \times (2 + 4) = 232 + 156 = 388\text{g}$$

### Example 3:

Model	: TP40F-0205-M3-S-R(1)Y(4)G(5)
Size of windows	: 40mm X 40mm
No. of windows	: 2 X 5 (10 windows)
Color	: 1 Red, 4 Yellow, 5 Green
Voltage	: AC200-220V
Type of Light	: LED FLAT UNIT



$$\text{Total Weight} = 42 \times (2 \times 5) + 28 \times (2 + 5) = 420 + 196 = 616\text{g}$$

## Instructions for use

### Mounting

(1) Mounting hole

Cut the panel in consideration of the number of column and line of window.

(2) Panel thickness

- Panel thickness is 1 to 6mm
- Carefully select the panel thickness in consideration of the weight of the product and wires to be used in wiring. Special attention is required for a transformer type product with many windows as it is heavier.

### Attachments to panel

(1) Procedure for attachment

- Insert the body from the surface of the panel to a mounting hole. Be careful of the right direction of the body. The side where a nameplate is stuck should be the top. However, for 1 window type with resin integrated frame (body code : 0201, 0301, 0302), locate the body in the direction its nameplate side comes left when seen from the surface of the window.
- Fit the attaching clip to a slot of the side plate from backside of the panel, then tighten the screw. Tightening torque for attaching clip should be 0.4 – 0.6 N.m
- Intense tightening may change the shape of integral molding frame. Tightening should be at around 0.4 N.m for the device with integral molding frame.
- Transformer unit type with 21 – 50 windows  
Transformer unit type with 20 or more windows is heavy, so you need to use increased number of attaching clips. The necessary number of clips are come together with your Flat display.

Before ordering:

Please contact us for request of written specification of products.