



SIGNAL-PARK



NUMERIC SIGN  
SP2-6XX / 180mm  
Presentation

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## 2 PRESENTATION

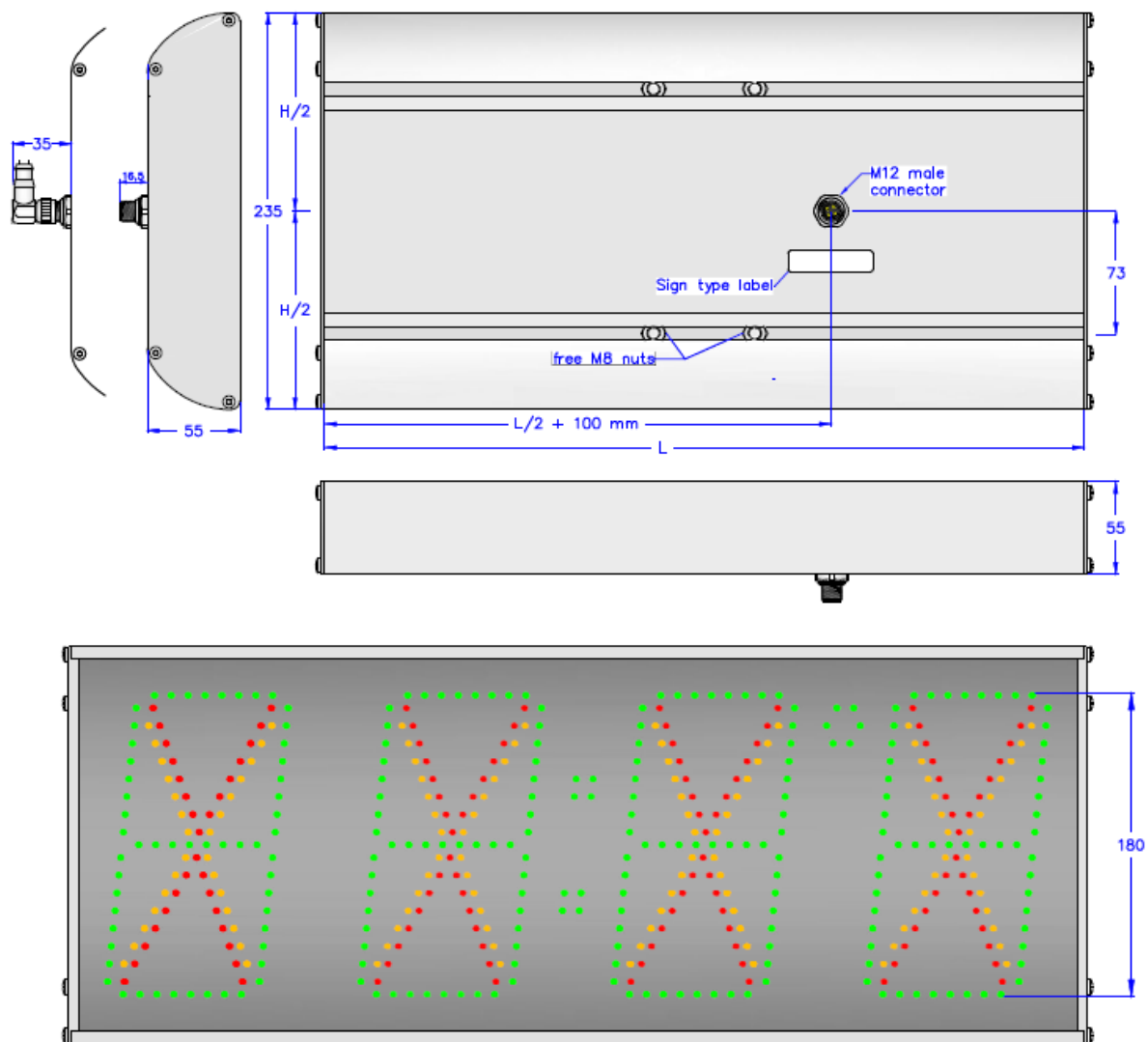
The numeric sign are declined on two sizes (100mm and 180mm height). The 180mm sign is made for the outdoor information and the 100mm one for the indoor information. On this document we going to introduce you the 180mm sign.

For more information about the 100mm height sign please refer to the specific documentation.



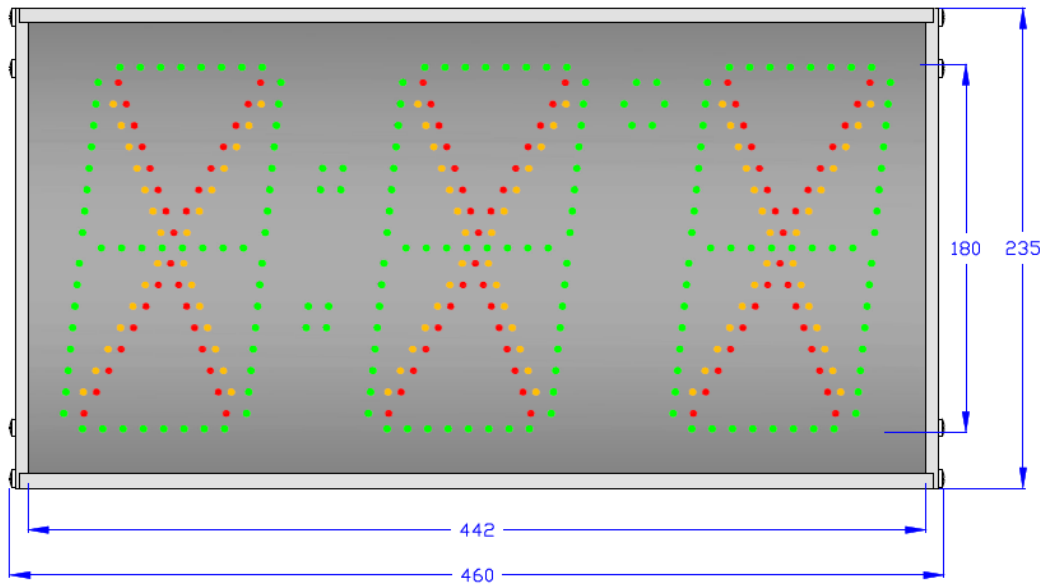
### 3 DIMENSIONS

Note: the length depends on the display type.

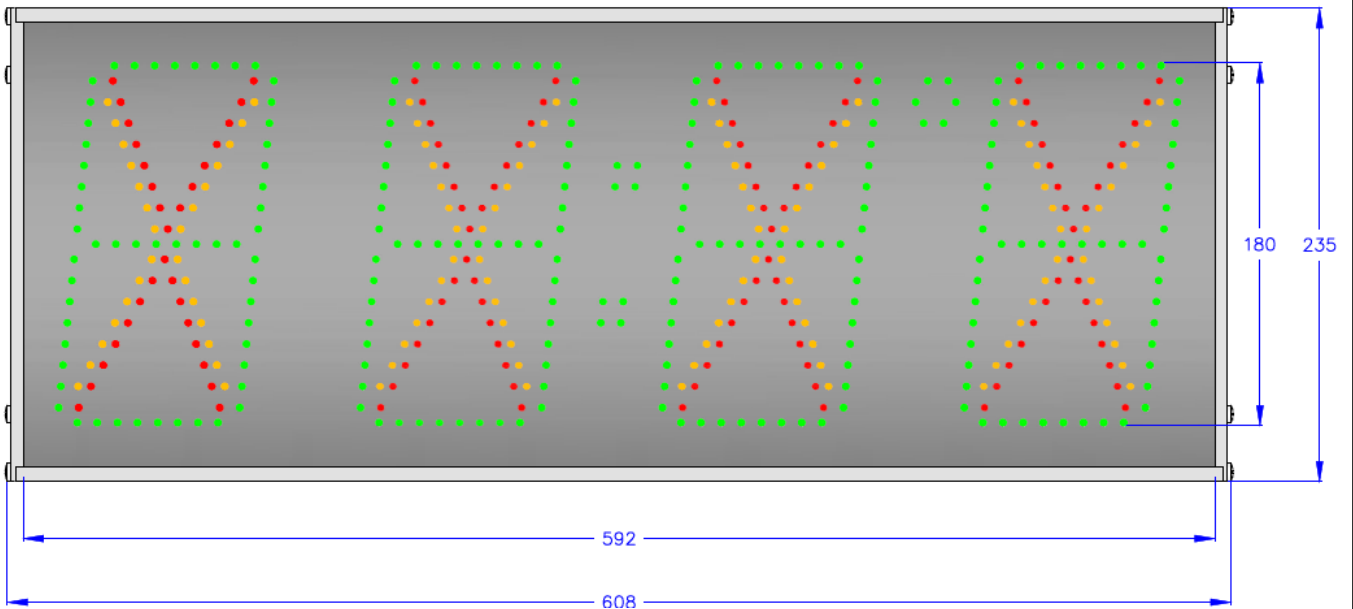


## 4 NUMERIC TYPES

### 4.1 3 DIGITS, SP2-630/180



### 4.2 4 DIGITS, SP2-640/180 (PREFERRED TYPE)



### 4.3 INTEGRATION EXAMPLE

This is an example of integration into an outdoor enclosure.



*Note: the enclosure must be built to avoid excess temperature rise inside it by using for example ventilation outlets and/or sunlight protection metal sheet.*

## 5 OPTIONS

---

### 5.1 OUTPUTS

On request 2 outputs (photo-MOS) are available for driving external devices. These outputs can be used for example to drive a green/red traffic light, main entrance barrier blocking, etc. Contact rating is 48Vdc/ac @ 600mA.

| Output | Information |
|--------|-------------|
| 1      | VACANT/FULL |
| 2      | ON/OFF      |

Remark: It's also possible to use a relay card installed inside the computer to drive a third party "VACANT/FULL" sign.


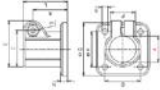

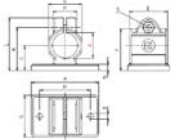

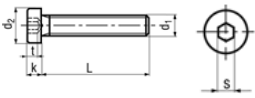

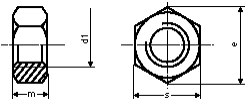

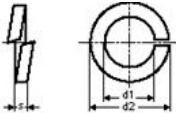

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### 5.2 INPUTS

On request an opto-isolated input is available for forcing the sign to the "FULL" state. This can be used for example to force the main entrance sign to "FULL" when the entrance barrier is blocked to guarantee information integrity

## 6 ACCESSORIES

### 6.1 FIXING SYSTEM

| LANG CLAMP             |          |  |   |
|------------------------|----------|--|---|
| Art.                   | Diameter |    |    |
| 3840                   | Ø30mm    |  |   |
| CLAMP BASE             |          |  |   |
| Art.                   | Diameter |    |    |
| 3841                   | Ø30mm    |  |   |
| SOCKET HEAD CAP SCREWS |          |  |   |
| Art.                   | Size     |   |  |
| 200330                 | M8x16    |  |   |
| NUTS                   |          |  |   |
| Art.                   | Size     |   |  |
| 200113                 | M8       |  |   |
| SPRING LOCK WASHERS    |          |  |   |
| Art.                   | Size     |  |  |
| 200331                 | M8       |  |   |
| SAW SET SQUARE         |          |  |   |
| Art.                   | Size     |  |   |
| 00412                  | M6       |  |   |



## 6.2 CONNECTING

| POWER SUPPLY and COMMUNICATION |        |   |   |
|--------------------------------|--------|---|---|
| Art.                           | Length |   |   |
| 42670                          | 60cm   |  |  |
| 42670.020                      | 200cm  |   |   |


## 7 FEATURES

|                                   |   |
|-----------------------------------|---|
| Character height                  | 180mm   |
| Display type                      | 7 segments  |
| Addressing                        | 1 to 240  |
| Ambient light sensor              | 0 to 2500lx   |
| Variable LED intensity            | 3.25% to 100% (automatic or manual)   |
| Possible display state            | <b>NUMBER,</b><br><b>NEARLY FULL,</b><br><b>FULL,</b><br><b>CLOSED,</b><br><b>RESERVED,</b><br><i>ADDRESS,</i><br><i>TIME (12H/24H),</i><br><i>DATE (DDMM, MMDD, MMY),</i><br><i>TEMPERATURE (°C and °F)</i><br><b>LUXMETER</b><br><b>VOLTMETER</b><br><b>USER SEQUENCE</b> |
| LED synchronization               | ✓   |
| Internal temperature measurement  | ✓   |
| Field updatable embedded software | ✓   |
| Input/output option               | ✓   |

## 8 ELECTRICAL CONNECTIONS

### 8.1 MAIN CONNECTION

The main connection regroups the power supply and the data bus in one M12 male connector at the rear of the sign.


|   |           | Designation | Color | M12 Pin |
|---|-----------|-------------|-------|---------|
|  | POWER bus | +48V        | BROWN | 1       |
|   |           | 0V          | BLUE  | 3       |
|   | DATA bus  | D+          | WHITE | 2       |
|   |           | D-          | BLACK | 4       |

## 9 SHORT SPECIFICATIONS

### 9.1 GENERAL

|                             |   |
|-----------------------------|---|
| Size                        | L?? x H235mm x P55mm (without connectors)<br><i>Length is depending of the type</i> |
| Housing material            | Anodized aluminium<br>Lateral cap: ABS, grey RAL7040<br>Front: PMMA (Plexiglas® XT) |
| Operating temperature range | -25°C to 55°C (-13°F to +131°F)   |
| Degree of protection        | IP44 (IP67 for M12 connector)   |

### 9.2 ELECTRICAL

|                            |   |
|----------------------------|---|
| Power supply               | 48VDC nominal (43.0VDC to 48.5VDC)  |
| Insulation category        | Class III  |
| Communication bus standard | RS-485, 2 wires (half-duplex)   |

### 9.3 LED

The LED display of the signs uses high intensity surface mounted LED with lens.

| Color | 100% Intensity (typ.) | Wavelength |
|-------|-----------------------|------------|
| Green | 1600mcd               | 525nm      |
| Red   | 1600mcd               | 626nm      |
| Amber | 1600mcd               | 590nm      |
| Blue  | 700mcd                | 470nm      |



# SIGNAL-PARK

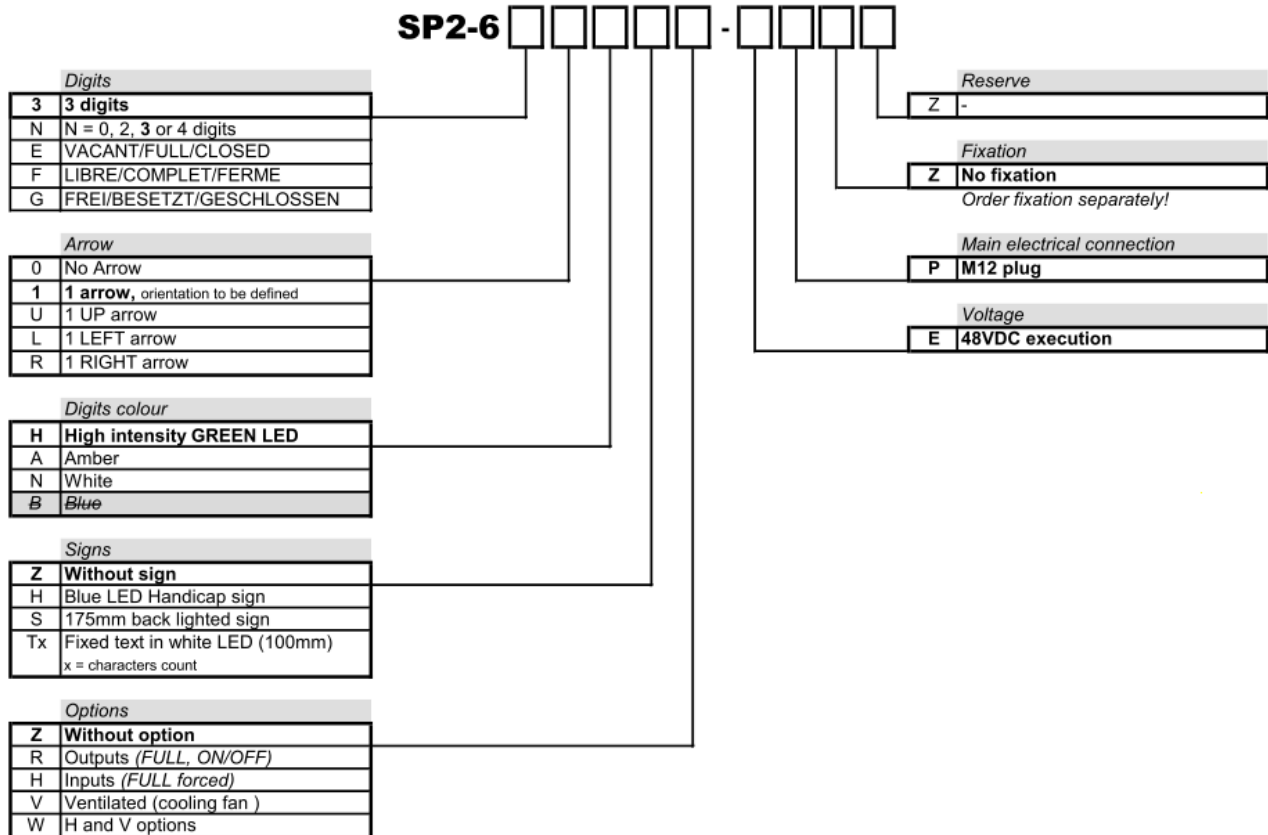
## SIGNS

**180 mm**

Contenu

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Nomenclature English



TECHNICAL DATA SHEET

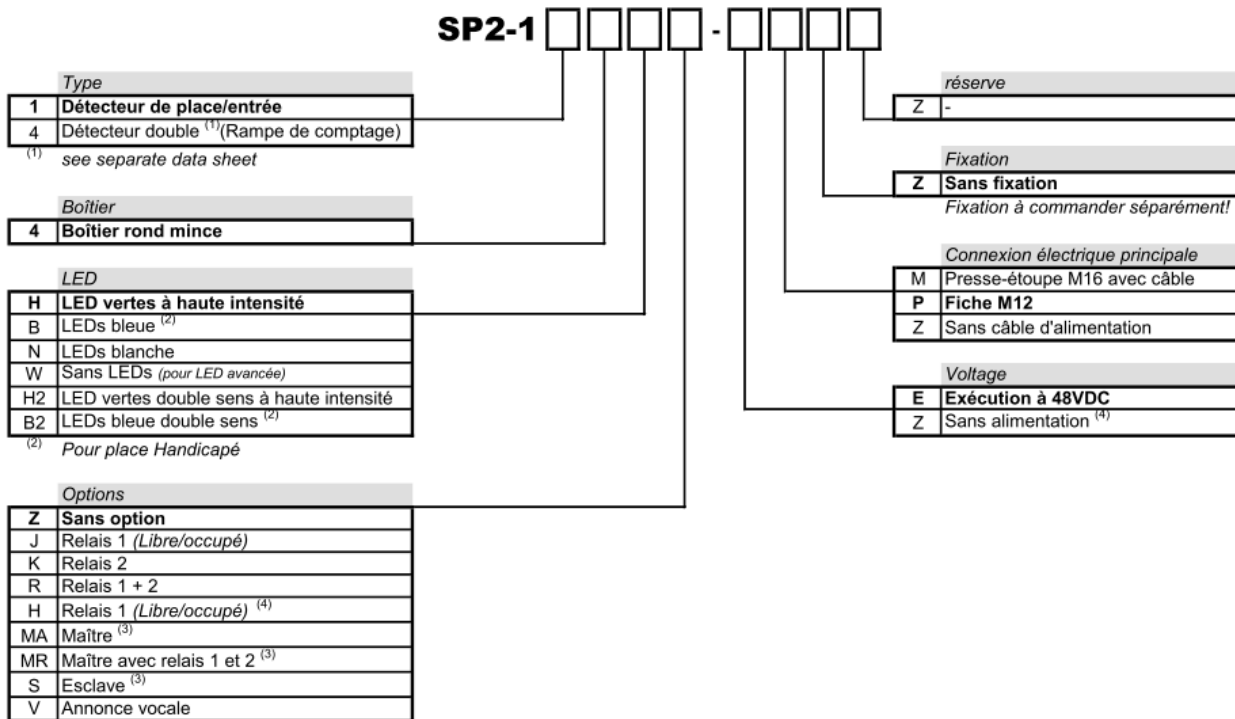
Note:

Preferred type in **BOLD**

Undefined position, not known or not applicable, the letter code is replaced by x or X. Example: SP2-631HZZ-ExZZ

For exact reference, use the article number.

## Nomenclature Français



| Type                                   |   |
|--|---|
| 1                                      | Détecteur de place/entrée                           |
| 4                                      | Détecteur double <sup>(1)</sup> (Rampe de comptage) |
| <sup>(1)</sup> see separate data sheet |   |

| Boîtier |                    |
|---------|--------------------|
| 4       | Boîtier rond mince |

| LED                                 |  |
|-------------------------------------|--|
| H                                   | LED vertes à haute intensité             |
| B                                   | LEDs bleue <sup>(2)</sup>                |
| N                                   | LEDs blanche                             |
| W                                   | Sans LEDs (pour LED avancée)             |
| H2                                  | LED vertes double sens à haute intensité |
| B2                                  | LEDs bleue double sens <sup>(2)</sup>    |
| <sup>(2)</sup> Pour place Handicapé |  |

| Options |  |
|---------|--|
| Z       | Sans option                              |
| J       | Relais 1 (Libre/occupé)                  |
| K       | Relais 2                                 |
| R       | Relais 1 + 2                             |
| H       | Relais 1 (Libre/occupé) <sup>(4)</sup>   |
| MA      | Maître <sup>(3)</sup>                    |
| MR      | Maître avec relais 1 et 2 <sup>(3)</sup> |
| S       | Esclave <sup>(3)</sup>                   |
| V       | Annonce vocale                           |

<sup>(3)</sup> SP2-144 Seulement

<sup>(4)</sup> hauteur fixée par magnétisme

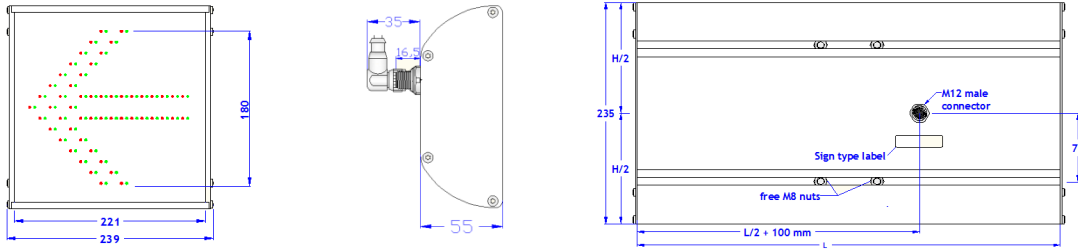
Note:

Type préféré en **Gras**

Position non définie, ne sait pas ou ne s'applique pas, la lettre de code est remplacé par exemple x ou X.: SP2-114HZ-ExZZ



# Dynamic Display Enseigne Dynamique




## SP2-601 / 180mm

Order N°Article: 3691 / 3691V (cooling fan option)

### Technical Specifications / Caracteristiques techniques

|   |  |
|---|--|
| Size<br>Taille:   | L239mm x H235mm x P55mm (without connectors)   |
| Weight<br>Poids:  | 0.9Kg  |
| Housing material<br>Boîtier:                                    | Anodized aluminum<br>Lateral cap: ABS, grey RAL7040<br>Front: PMMA (Plexiglas® XT)<br><i>UL94-V0 compliant plastics (plastiques conformes)</i> |
| Operating temperature range<br>Temperature de fonctionnement:   | -25°C to 55°C (-13°F to +131°F)  |
| Storage temperature range:<br>Plage de temperature de stockage: | -40°C to 85°C (-40°F to +185°F)  |
| Relative humidity<br>Humidité relative:                         | 5-95%RH (not condensing) (sans condensation)   |
| Degree of protection<br>Degré de protection:                    | IP44 (IP67 for M12 connectors) (IP67 avec connecteurs M12)<br>IP30 (Cooling fan option) (option ventilée)                                      |

### Electrical / electricité

|   |   |
|---|---|
| Power supply:<br>Alimentation:                | 48VDC nominal (43.0VDC to 48.5VDC)<br><i>Note: voltages above 49.0V destroys internal surge protection</i><br><i>Note: tensions supérieures à 49.0V détruiront la protection interne.</i> |
| Insulation category<br>Catégorie d'isolation: | Class III    |
| Consumption<br>Consommation:                  | 300mA max to 700mA max. Communication bus standard<br>RS-485 ,2 wires (half-duplex) / RS-485, 2 fils (semi-duplex)  |

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## Inputs (options) / Entrées (options)

|   |          |
|---|----------|
| <b>Insulation</b><br>Isolation                | 3Kv max. |
| <b>Driving current</b><br>Courant de commande | 7mA typ. |

## Outputs (options) / Sorties (options)

|                                |                    |
|--------------------------------|--------------------|
| <b>Insulation</b><br>Isolation | 3KV max.           |
| <b>Voltage</b><br>Tension      | 48Vdc / 30Vac max. |
| <b>Current</b><br>Courant      | 600mA max.         |

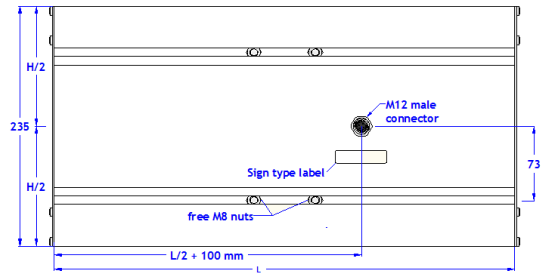
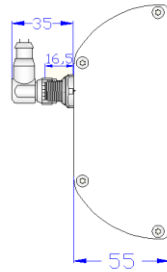
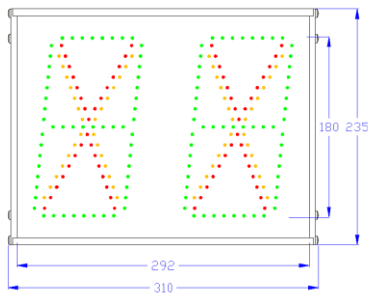
## LED display / Affichage LED

The LED display of the signs uses high intensity surface mounted LED with lens. Color and intensity can change slightly between productions due to components tolerances.

L'affichage de l'enseigne utilise des LED's de haute intensité. La couleur ainsi que l'intensité des LED's peuvent changer légèrement suivant la production en raison de la tolérance des composants.

|  |       |
|--|-------|
| <b>Character height</b><br>Hauteur des caractères:                       | 180mm |
| <b>Viewing angle (half intensity):</b><br>Angle de vue (semi- intensité) | 30°   |
| <b>Viewing angle</b><br>Angle de vue                                     | 180°  |
| <b>Viewing distance</b><br>Distance lisible                              | 60m   |

# Dynamic Display Enseigne Dynamique



## SP2-620 / 180mm

Order N°Article: 3692 / 3692V (cooling fan option)

### Technical Specifications / Caracteristiques techniques

|   |   |
|---|---|
| Size<br>Taille:   | L310mm x H235mm x P55mm (without connectors)  |
| Weight<br>Poids:  | 0.9Kg   |
| Housing material<br>Boîtier:                                    | Anodized aluminum<br>Lateral cap: ABS, grey RAL7040<br>Front: PMMA (Plexiglas® XT)<br>UL94-V0 compliant plastics (plastiques conformes) |
| Operating temperature range<br>Temperature de fonctionnement:   | -25°C to 55°C (-13°F to +131°F)   |
| Storage temperature range:<br>Plage de temperature de stockage: | -40°C to 85°C (-40°F to +185°F)   |
| Relative humidity<br>Humidité relative:                         | 5-95%RH (not condensing) (sans condensation)  |
| Degree of protection<br>Degré de protection:                    | IP44 (IP67 for M12 connectors) (IP67 avec connecteurs M12)<br>IP30 (Cooling fan option) (option ventilée)                               |

TECHNICAL DATA SHEET

### Electrical / electricité

|   |   |
|---|---|
| Power supply:<br>Alimentation:                | 48VDC nominal (43.0VDC to 48.5VDC)<br><i>Note: voltages above 49.0V destroys internal surge protection</i><br><i>Note: tensions supérieures à 49.0V détruiront la protection interne.</i> |
| Insulation category<br>Catégorie d'isolation: | Class III   |
| Consumption<br>Consommation:                  | 300mA max to 700mA max. Communication bus standard<br>RS-485 ,2 wires (half-duplex) / RS-485, 2 fils (semi-duplex)  |

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# Dynamic Display

## Enseigne Dynamique

### Inputs (options) / Entrées (options)

|  |          |
|--|----------|
| Insulation<br>Isolation                | 3Kv max. |
| Driving current<br>Courant de commande | 7mA typ. |

### Outputs (options) / Sorties (options)

|                         |                    |
|-------------------------|--------------------|
| Insulation<br>Isolation | 3KV max.           |
| Voltage<br>Tension      | 48Vdc / 30Vac max. |
| Current<br>Courrant     | 600mA max.         |

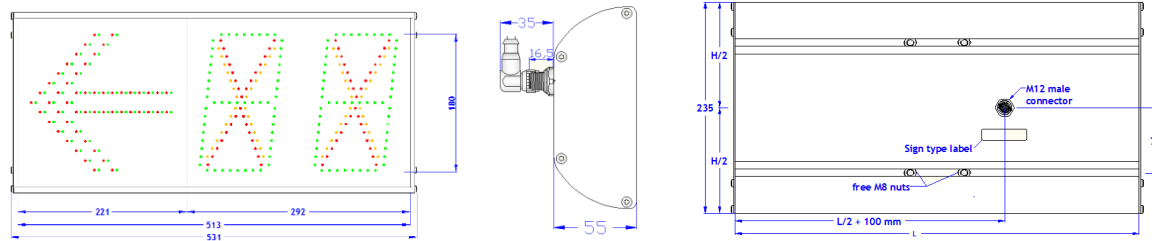
### LED display / Affichage LED

The LED display of the signs uses high intensity surface mounted LED with lens. Color and intensity can change slightly between productions due to components tolerances.

L'affichage de l'enseigne utilise des LED's de haute intensité. La couleur ainsi que l'intensité des LED's peuvent changer légèrement suivant la production en raison de la tolérance des composants.

|   |            |
|---|------------|
| Character height<br>Hauteur des caractères:                       | 180mm      |
| Display type<br>Type d'affichage:                                 | 7 segments |
| LED's per segment<br>LED's par segment:                           | 7 to 9     |
| Red crosses<br>Croix rouge  | Yes / Oui  |
| Amber crosses<br>Croix ambrée                                     | Yes / Oui  |
| Viewing angle (half intensity):<br>Angle de vue (semi- intensité) | 30°        |
| Viewing angle<br>Angle de vue                                     | 180°       |
| Viewing distance<br>Distance lisible                              | 60m        |

# Dynamic Display Enseigne Dynamique



## SP2-621 / 180mm

### Technical Specifications / Caractéristiques techniques

|   |   |
|---|---|
| Size<br>Taille:   | L531mm x H235mm x P55mm (without connectors)  |
| Weight<br>Poids:  | 1.3Kg   |
| Housing material<br>Boîtier:                                    | Anodized aluminum<br>Lateral cap: ABS, grey RAL7040<br>Front: PMMA (Plexiglas® XT)<br>UL94-V0 compliant plastics (plastiques conformes) |
| Operating temperature range<br>Température de fonctionnement:   | -25°C to 55°C (-13°F to +131°F)   |
| Storage temperature range:<br>Plage de température de stockage: | -40°C to 85°C (-40°F to +185°F)   |
| Relative humidity<br>Humidité relative:                         | 5-95%RH (not condensing) (sans condensation)  |
| Degree of protection<br>Degré de protection:                    | IP44 (IP67 for M12 connectors) (IP67 avec connecteurs M12)<br>IP30 (Cooling fan option) (option ventilée)                               |

TECHNICAL DATA SHEET

### Electrical / électricité

|   |   |
|---|---|
| Power supply:<br>Alimentation:                | 48VDC nominal (43.0VDC to 48.5VDC)<br>Note: voltages above 49.0V destroys internal surge protection<br>Note: tensions supérieures à 49.0V détruiront la protection interne. |
| Insulation category<br>Catégorie d'isolation: | Class III   |
| Consumption<br>Consommation:                  | 300mA max to 700mA max. Communication bus standard<br>RS-485 ,2 wires (half-duplex) / RS-485, 2 fils (semi-duplex)  |

# Dynamic Display

## Enseigne Dynamique

### Inputs (options) / Entrées (options)

|  |          |
|--|----------|
| Insulation<br>Isolation                | 3Kv max. |
| Driving current<br>Courant de commande | 7mA typ. |

### Outputs (options) / Sorties (options)

|                         |                    |
|-------------------------|--------------------|
| Insulation<br>Isolation | 3KV max.           |
| Voltage<br>Tension      | 48Vdc / 30Vac max. |
| Current<br>Courrant     | 600mA max.         |

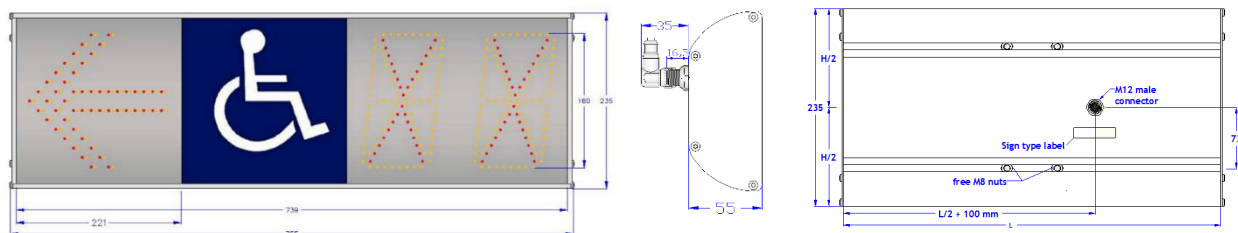
### LED display / Affichage LED

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L'affichage de l'enseigne utilise des LED's de haute intensité. La couleur ainsi que l'intensité des LED's peuvent changer légèrement suivant la production en raison de la tolérance des composants.

|   |            |
|---|------------|
| Character height<br>Hauteur des caractères:                       | 180mm      |
| Display type<br>Type d'affichage:                                 | 7 segments |
| LED's per segment<br>LED's par segment:                           | 7 to 9     |
| Red crosses<br>Croix rouge  | Yes / Oui  |
| Amber crosses<br>Croix ambrée                                     | Yes / Oui  |
| Viewing angle (half intensity):<br>Angle de vue (semi- intensité) | 30°        |
| Viewing angle<br>Angle de vue                                     | 180°       |
| Viewing distance<br>Distance lisible                              | 60m        |

# Dynamic Display Enseigne Dynamique



## SP2-621H / 180mm

Order N°Article: 3698

### Technical Specifications / Caracteristiques techniques

**Size**

Taille: L755mm x H235mm x P55mm (without connectors)

**Weight**

Poids: 2,24Kg

**Housing material**

Boîtier: Anodized aluminum  
Lateral cap: ABS, grey RAL7040  
Front: PMMA (Plexiglas® XT)  
UL94-V0 compliant plastics (plastiques conformes)

**Operating temperature range**

Temperature de fonctionnement: -25°C to 55°C (-13°F to +131°F)

**Storage temperature range:**

Plage de temperature de stockage: -40°C to 85°C (-40°F to +185°F)

**Relative humidity**

Humidité relative: 5-95%RH (not condensing) (sans condensation)

**Degree of protection**

Degré de protection: IP44 (IP67 for M12 connectors) (IP67 avec connecteurs M12)  
IP30 (Cooling fan option) (option ventilée)

### Electrical / electricité

**Power supply:**

Alimentation: 48VDC nominal (43.0VDC to 48.5VDC)  
Note: voltages above 49.0V destroys internal surge protection  
Note: tensions supérieures à 49.0V détruiront la protection interne.

**Insulation category**

Catégorie d'isolation: Class III

**Consumption**

Consommation: 300mA max to 700mA max. Communication bus standard  
RS-485 ,2 wires (half-duplex) / RS-485, 2 fils (semi-duplex)

# Dynamic Display

## Enseigne Dynamique

### Inputs (options) / Entrées (options)

|                         |          |
|-------------------------|----------|
| Insulation<br>Isolation | 3Kv max. |
|-------------------------|----------|

|  |          |
|--|----------|
| Driving current<br>Courant de commande | 7mA typ. |
|--|----------|

### Outputs (options) / Sorties (options)

|                         |          |
|-------------------------|----------|
| Insulation<br>Isolation | 3KV max. |
|-------------------------|----------|

|                    |                    |
|--------------------|--------------------|
| Voltage<br>Tension | 48Vdc / 30Vac max. |
|--------------------|--------------------|

|                    |            |
|--------------------|------------|
| Current<br>Courant | 600mA max. |
|--------------------|------------|

### LED DISPLAY / AFFICHAGE LED

The LED display of the signs uses high intensity surface mounted LED with lens. Color and intensity can change slightly between productions due to components tolerances.

L'affichage de l'enseigne utilise des LED's de haute intensité. La couleur ainsi que l'intensité des LED's peuvent changer légèrement suivant la production en raison de la tolérance des composants.

|   |       |
|---|-------|
| Character height<br>Hauteur des caractères: | 180mm |
|---|-------|

|                                   |            |
|-----------------------------------|------------|
| Display type<br>Type d'affichage: | 7 segments |
|-----------------------------------|------------|

|   |        |
|---|--------|
| LED's per segment<br>LED's par segment: | 7 to 9 |
|---|--------|

|                            |           |
|----------------------------|-----------|
| Red crosses<br>Croix rouge | Yes / Oui |
|----------------------------|-----------|

|                               |           |
|-------------------------------|-----------|
| Amber crosses<br>Croix ambrée | Yes / Oui |
|-------------------------------|-----------|

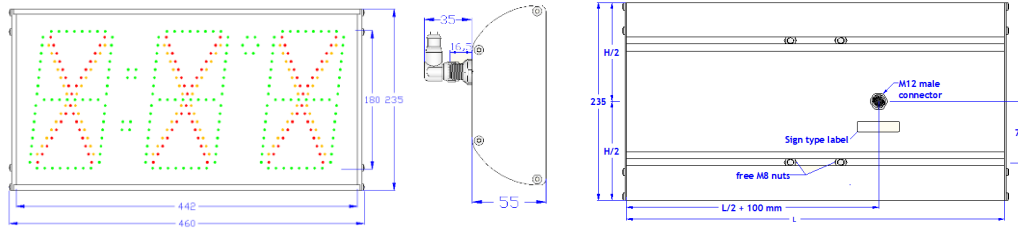
|   |     |
|---|-----|
| Viewing angle (half intensity):<br>Angle de vue (semi- intensité) | 30° |
|---|-----|

|                               |      |
|-------------------------------|------|
| Viewing angle<br>Angle de vue | 180° |
|-------------------------------|------|

|                                      |     |
|--------------------------------------|-----|
| Viewing distance<br>Distance lisible | 60m |
|--------------------------------------|-----|



# Dynamic Display Enseigne Dynamique



## SP2-630 / 180mm


Order N°Article: 3693 / 3693V (cooling fan option)

### Technical Specifications / Caracteristiques techniques

|   |   |
|---|---|
| Size<br>Taille:   | L460mm x H235mm x P55mm (without connectors)  |
| Weight<br>Poids:  | 2,24Kg  |
| Housing material<br>Boîtier:                                    | Anodized aluminum<br>Lateral cap: ABS, grey RAL7040<br>Front: PMMA (Plexiglas® XT)<br>UL94-V0 compliant plastics (plastiques conformes) |
| Operating temperature range<br>Temperature de fonctionnement:   | -25°C to 55°C (-13°F to +131°F)   |
| Storage temperature range:<br>Plage de temperature de stockage: | -40°C to 85°C (-40°F to +185°F)   |
| Relative humidity<br>Humidité relative:                         | 5-95%RH (not condensing) (sans condensation)  |
| Degree of protection<br>Degré de protection:                    | IP44 (IP67 for M12 connectors) (IP67 avec connecteurs M12)<br><br>IP30 (Cooling fan option) (option ventilée)                           |

TECHNICAL DATA SHEET

### Electrical / electricité

|   |   |
|---|---|
| Power supply:<br>Alimentation:                | 48VDC nominal (43.0VDC to 48.5VDC)<br>Note: voltages above 49.0V destroys internal surge protection<br>Note: tensions supérieures à 49.0V détruiront la protection interne. |
| Insulation category<br>Catégorie d'isolation: | Class III    |
| Consumption<br>Consommation:                  | 300mA max to 700mA max. Communication bus standard<br>RS-485 ,2 wires (half-duplex) / RS-485, 2 fils (semi-duplex)  |

## Inputs (options) / Entrées (options)

|  |          |
|--|----------|
| Insulation<br>Isolation                | 3Kv max. |
| Driving current<br>Courant de commande | 7mA typ. |

## Outputs (options) / Sorties (options)

|                         |                    |
|-------------------------|--------------------|
| Insulation<br>Isolation | 3KV max.           |
| Voltage<br>Tension      | 48Vdc / 30Vac max. |

|                     |            |
|---------------------|------------|
| Current<br>Courrant | 600mA max. |
|---------------------|------------|

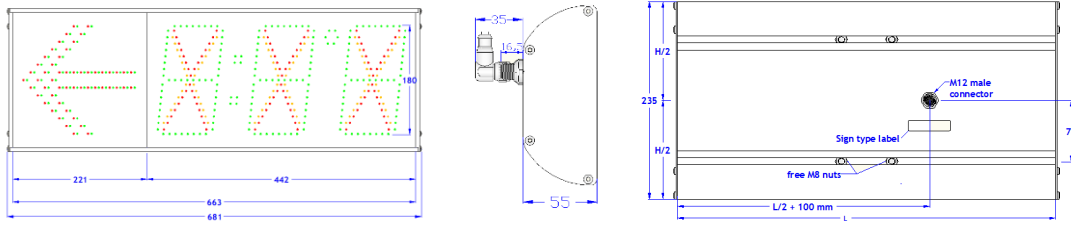
## LED DISPLAY / AFFICHAGE LED

The LED display of the signs uses high intensity surface mounted LED with lens. Color and intensity can change slightly between productions due to components tolerances.

L'affichage de l'enseigne utilise des LED's de haute intensité. La couleur ainsi que l'intensité des LED's peuvent changer légèrement suivant la production en raison de la tolérance des composants.

|   |            |
|---|------------|
| Character height<br>Hauteur des caractères:                       | 180mm      |
| Display type<br>Type d'affichage:                                 | 7 segments |
| LED's per segment<br>LED's par segment:                           | 7 to 9     |
| Red crosses<br>Croix rouge  | Yes / Oui  |
| Amber crosses<br>Croix ambrée                                     | Yes / Oui  |
| Viewing angle (half intensity):<br>Angle de vue (semi- intensité) | 30°        |
| Viewing angle<br>Angle de vue                                     | 180°       |
| Viewing distance<br>Distance lisible                              | 60m        |

# Dynamic Display Enseigne Dynamique



## SP2-631 / 180mm

Order N°Article: 3695 / 3695V (cooling fan option)

### Technical Specifications / Caracteristiques techniques

**Size**

Taille:

L681mm x H235mm x P55mm (without connectors)

**Weight**

Poids:

2.70Kg

**Housing material**

Boîtier:

Anodized aluminum  
Lateral cap: ABS, grey RAL7040  
Front: PMMA (Plexiglas® XT)  
*UL94-V0 compliant plastics (plastiques conformes)*

**Operating temperature range**

Temperature de fonctionnement:

-25°C to 55°C (-13°F to +131°F)

**Storage temperature range:**

Plage de temperature de stockage:

-40°C to 85°C (-40°F to +185°F)

**Relative humidity**

Humidité relative:

5-95%RH (not condensing) (sans condensation)

**Degree of protection**

Degré de protection:

IP44 (IP67 for M12 connectors) (IP67 avec connecteurs M12)

IP30 (Cooling fan option) (option ventilée)

### Electrical / electricité

**Power supply:**

Alimentation:

48VDC nominal (43.0VDC to 48.5VDC)

*Note: voltages above 49.0V destroys internal surge protection*

*Note: tensions supérieures à 49.0V détruiront la protection interne.*

**Insulation category**

Catégorie d'isolation:

Class III 

**Consumption**

Consommation:

300mA max to 700mA max. Communication bus standard  
RS-485 ,2 wires (half-duplex) / RS-485, 2 fils (semi-duplex)

# Dynamic Display

## Enseigne Dynamique

### Inputs (options) / Entrées (options)

|  |          |
|--|----------|
| Insulation<br>Isolation                | 3Kv max. |
| Driving current<br>Courant de commande | 7mA typ. |

### Outputs (options) / Sorties (options)

|                         |                    |
|-------------------------|--------------------|
| Insulation<br>Isolation | 3KV max.           |
| Voltage<br>Tension      | 48Vdc / 30Vac max. |
| Current<br>Courant      | 600mA max.         |

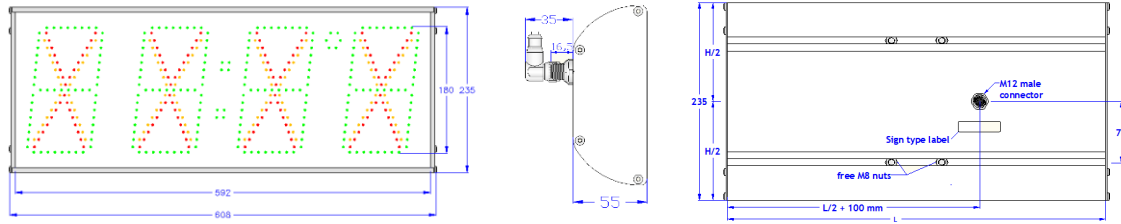
### LED display / Affichage LED

The LED display of the signs uses high intensity surface mounted LED with lens. Color and intensity can change slightly between productions due to components tolerances.

L'affichage de l'enseigne utilise des LED's de haute intensité. La couleur ainsi que l'intensité des LED's peuvent changer légèrement suivant la production en raison de la tolérance des composants.

|   |            |
|---|------------|
| Character height<br>Hauteur des caractères:                       | 180mm      |
| Display type<br>Type d'affichage:                                 | 7 segments |
| LED's per segment<br>LED's par segment:                           | 7 to 9     |
| Red crosses<br>Croix rouge  | Yes / Oui  |
| Amber crosses<br>Croix ambrée                                     | Yes / Oui  |
| Viewing angle (half intensity):<br>Angle de vue (semi- intensité) | 30°        |
| Viewing angle<br>Angle de vue                                     | 180°       |
| Viewing distance<br>Distance lisible                              | 60m        |

# Dynamic Display Enseigne Dynamique



## SP2-640 / 180mm

Order N°Article: 3694 / 3694V (cooling fan option)

### Technical Specifications / Caracteristiques techniques

|   |   |
|---|---|
| Size<br>Taille:   | L610mm x H235mm x P55mm (without connectors)  |
| Weight<br>Poids:  | 2.70Kg  |
| Housing material<br>Boîtier:                                    | Anodized aluminum<br>Lateral cap: ABS, grey RAL7040<br>Front: PMMA (Plexiglas® XT)<br>UL94-V0 compliant plastics (plastiques conformes) |
| Operating temperature range<br>Temperature de fonctionnement:   | -25°C to 55°C (-13°F to +131°F)   |
| Storage temperature range:<br>Plage de temperature de stockage: | -40°C to 85°C (-40°F to +185°F)   |
| Relative humidity<br>Humidité relative:                         | 5-95%RH (not condensing) (sans condensation)  |
| Degree of protection<br>Degré de protection:                    | IP44 (IP67 for M12 connectors) (IP67 avec connecteurs M12)<br>IP30 (Cooling fan option) (option ventilée)                               |

TECHNICAL DATA SHEET

### Electrical / electricité

|   |   |
|---|---|
| Power supply:<br>Alimentation:                | 48VDC nominal (43.0VDC to 48.5VDC)<br><i>Note: voltages above 49.0V destroys internal surge protection</i><br><i>Note: tensions supérieures à 49.0V détruiront la protection interne.</i> |
| Insulation category<br>Catégorie d'isolation: | Class III   |
| Consumption<br>Consommation:                  | 300mA max to 700mA max. Communication bus standard<br>RS-485 ,2 wires (half-duplex) / RS-485, 2 fils (semi-duplex)  |

### Inputs (options) / Entrées (options)

|                         |          |
|-------------------------|----------|
| Insulation<br>Isolation | 3Kv max. |
|-------------------------|----------|

|  |          |
|--|----------|
| Driving current<br>Courant de commande | 7mA typ. |
|--|----------|

### Outputs (options) / Sorties (options)

|                         |          |
|-------------------------|----------|
| Insulation<br>Isolation | 3KV max. |
|-------------------------|----------|

|                    |                    |
|--------------------|--------------------|
| Voltage<br>Tension | 48Vdc / 30Vac max. |
|--------------------|--------------------|

|                    |            |
|--------------------|------------|
| Current<br>Courant | 600mA max. |
|--------------------|------------|

### LED display / Affichage LED

The LED display of the signs uses high intensity surface mounted LED with lens. Color and intensity can change slightly between productions due to components tolerances.

L'affichage de l'enseigne utilise des LED's de haute intensité. La couleur ainsi que l'intensité des LED's peuvent changer légèrement suivant la production en raison de la tolérance des composants.

|   |       |
|---|-------|
| Character height<br>Hauteur des caractères: | 180mm |
|---|-------|

|                                   |            |
|-----------------------------------|------------|
| Display type<br>Type d'affichage: | 7 segments |
|-----------------------------------|------------|

|   |        |
|---|--------|
| LED's per segment<br>LED's par segment: | 7 to 9 |
|---|--------|

|                            |           |
|----------------------------|-----------|
| Red crosses<br>Croix rouge | Yes / Oui |
|----------------------------|-----------|

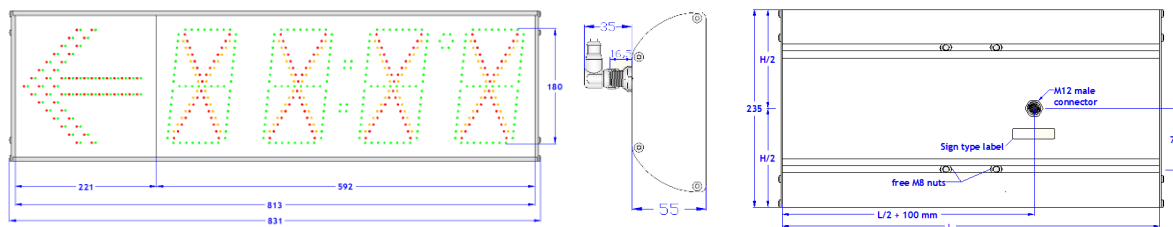
|                               |           |
|-------------------------------|-----------|
| Amber crosses<br>Croix ambrée | Yes / Oui |
|-------------------------------|-----------|

|   |     |
|---|-----|
| Viewing angle (half intensity):<br>Angle de vue (semi- intensité) | 30° |
|---|-----|

|                               |      |
|-------------------------------|------|
| Viewing angle<br>Angle de vue | 180° |
|-------------------------------|------|

|                                      |     |
|--------------------------------------|-----|
| Viewing distance<br>Distance lisible | 60m |
|--------------------------------------|-----|

# Dynamic Display Enseigne Dynamique



## SP2-641 / 180mm


Order N°Article: 3696 / 3696V (cooling fan option)

### Technical Specifications / Caracteristiques techniques

|   |   |
|---|---|
| Size<br>Taille:   | L610mm x H235mm x P55mm (without connectors)  |
| Weight<br>Poids:  | 3Kg   |
| Housing material<br>Boîtier:                                    | Anodized aluminum<br>Lateral cap: ABS, grey RAL7040<br>Front: PMMA (Plexiglas® XT)<br>UL94-V0 compliant plastics (plastiques conformes) |
| Operating temperature range<br>Température de fonctionnement:   | -25°C to 55°C (-13°F to +131°F)   |
| Storage temperature range:<br>Plage de température de stockage: | -40°C to 85°C (-40°F to +185°F)   |
| Relative humidity<br>Humidité relative:                         | 5-95%RH (not condensing) (sans condensation)  |
| Degree of protection<br>Degré de protection:                    | IP44 (IP67 for M12 connectors) (IP67 avec connecteurs M12)<br>IP30 (Cooling fan option) (option ventilée)                               |

TECHNICAL DATA SHEET

### Electrical / électricité

|   |   |
|---|---|
| Power supply:<br>Alimentation:                | 48VDC nominal (43.0VDC to 48.5VDC)<br><i>Note: voltages above 49.0V destroys internal surge protection</i><br><i>Note: tensions supérieures à 49.0V détruiront la protection interne.</i> |
| Insulation category<br>Catégorie d'isolation: | Class III    |
| Consumption<br>Consommation:                  | 300mA max to 700mA max. Communication bus standard<br>RS-485 ,2 wires (half-duplex) / RS-485, 2 fils (semi-duplex)  |

### Inputs (options) / Entrées (options)

|                         |          |
|-------------------------|----------|
| Insulation<br>Isolation | 3Kv max. |
|-------------------------|----------|

|  |          |
|--|----------|
| Driving current<br>Courant de commande | 7mA typ. |
|--|----------|

### Outputs (options) / Sorties (options)

|                         |          |
|-------------------------|----------|
| Insulation<br>Isolation | 3KV max. |
|-------------------------|----------|

|                    |                    |
|--------------------|--------------------|
| Voltage<br>Tension | 48Vdc / 30Vac max. |
|--------------------|--------------------|

|                    |            |
|--------------------|------------|
| Current<br>Courant | 600mA max. |
|--------------------|------------|

### LED display / Affichage LED

The LED display of the signs uses high intensity surface mounted LED with lens. Color and intensity can change slightly between productions due to components tolerances.

L'affichage de l'enseigne utilise des LED's de haute intensité. La couleur ainsi que l'intensité des LED's peuvent changer légèrement suivant la production en raison de la tolérance des composants.

|   |       |
|---|-------|
| Character height<br>Hauteur des caractères: | 180mm |
|---|-------|

|                                   |            |
|-----------------------------------|------------|
| Display type<br>Type d'affichage: | 7 segments |
|-----------------------------------|------------|

|   |        |
|---|--------|
| LED's per segment<br>LED's par segment: | 7 to 9 |
|---|--------|

|                            |           |
|----------------------------|-----------|
| Red crosses<br>Croix rouge | Yes / Oui |
|----------------------------|-----------|

|                               |           |
|-------------------------------|-----------|
| Amber crosses<br>Croix ambrée | Yes / Oui |
|-------------------------------|-----------|

|   |     |
|---|-----|
| Viewing angle (half intensity):<br>Angle de vue (semi- intensité) | 30° |
|---|-----|

|                               |      |
|-------------------------------|------|
| Viewing angle<br>Angle de vue | 180° |
|-------------------------------|------|

|                                      |     |
|--------------------------------------|-----|
| Viewing distance<br>Distance lisible | 60m |
|--------------------------------------|-----|