

# HYBRID CONTROL GEAR



- Available in 1Step/4Step and TRI Control DALI/0-10V/Simple Switch
- Suitable for RAPTOR 3/4, BRITELINE 1/2
- IP20 and IP65 models
- 240V and 415V options
- Simple 2 wire connection connection between driver and luminaire (Luminaire must be earthed)
- Maximum distance between gear and floodlight:

Cable Size (mm <sup>2</sup> )	RAPTOR (3/4) Length (m)	BRITELINE (G1/G2) Length (m)
1.5	1000	500
2.5	2000	1000
4.0	3200	1600
6.0	4800	2400

- High immunity to surges, low inrush /leakage current

## Hybrid Control BENEFITS

- Available in 1Step/4Step and TRI Control DALI/0-10V/Simple Switch
- Suitable for RAPTOR 3/4, BRITELINE 1/2
- IP20 and IP65 models available in both 240V and 415V
- Requires a two core cable + Earth between the driver and luminaire, providing an ideal solution for HID Floodlight retrofits. Installation of earthing is required as per Australian Standards
- For new installations, the distance between the control gear and the floodlight has been greatly improved. This offers benefits for both installation and maintenance
- Proven to offer protection in extreme environments with up to 65°C ambient temperature for IP20 model, 50°C for IP65 model.
- Offering high immunity to surges and low inrush/leakage current
- Low leakage current <0.2mA\*\*
- Power factor >0.95 Typical

\*\* +0.8mA for DALI versions



IP65 Hybrid weather proof drivers

GENERAL INFORMATION

RCM Mark	Yes
ROHS compliant	Yes
Testing standard	AS/NZS 61347.1:2016 AS/NZS 61347.2.13:2018
Electromagnetic compatibility (EMC)	AS/NZS CISPR15

HOUSING AND FINISH IP 20

Housing	Steel
Housing finish	Powder coated satin black
Tightness level	IP 20

HOUSING AND FINISH IP 65

Housing	Die cast aluminium
Housing finish	Powder coated grey
Tightness level	IP 65

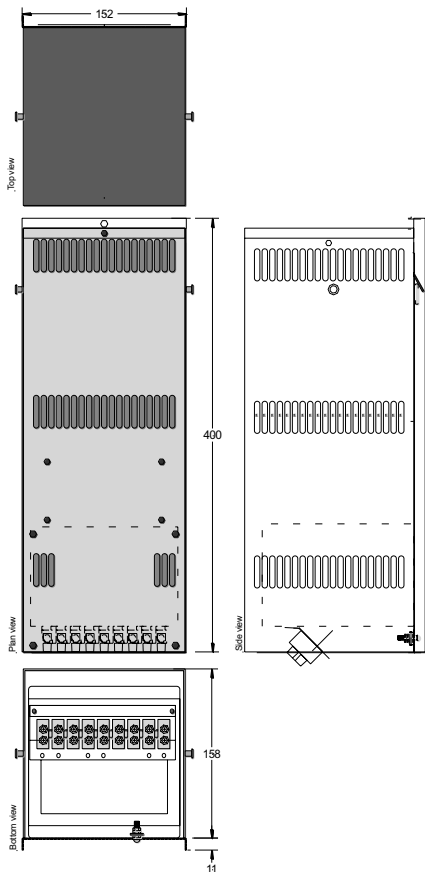
ELECTRICAL INFORMATION

Electrical class	Class I
Nominal voltage	240V/415V – 50Hz/60Hz
Power factor (at full load)	> 0.95
Surge protection (kV)	10kV for 1 & 4 Step 8kV for DALI

DIMENSIONS

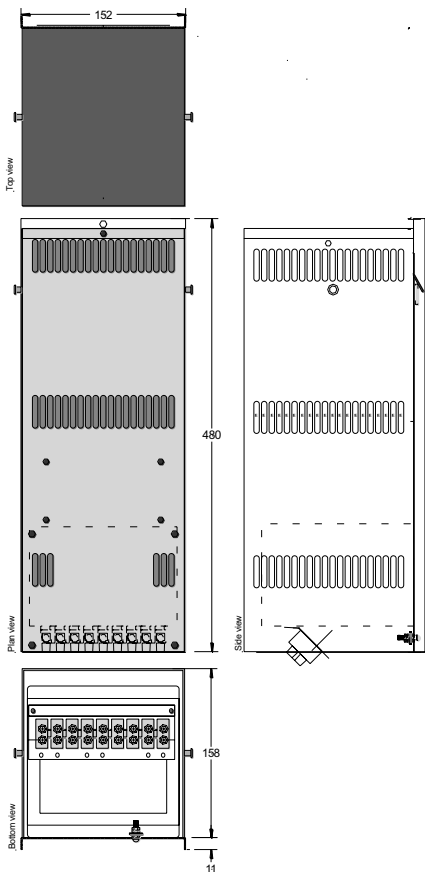
IP20 1 STEP Gear

HYB1ST240V  
HYB1ST415V



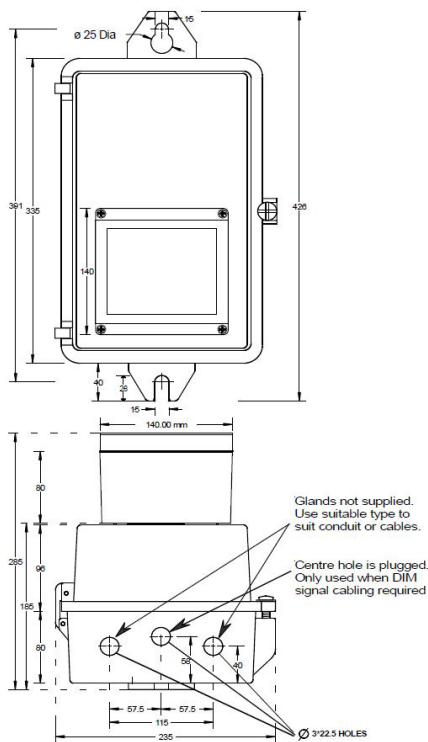
IP20 4 STEP/ TRI CONTROL DALI

HYB4ST240V  
HYB4ST415V  
  
HYBD240V  
HYBD415V



IP65 1 Step/4Step/TRI Control DALI

HYB1ST240VIP65  
HYB1ST415VIP65



ORDER CODES

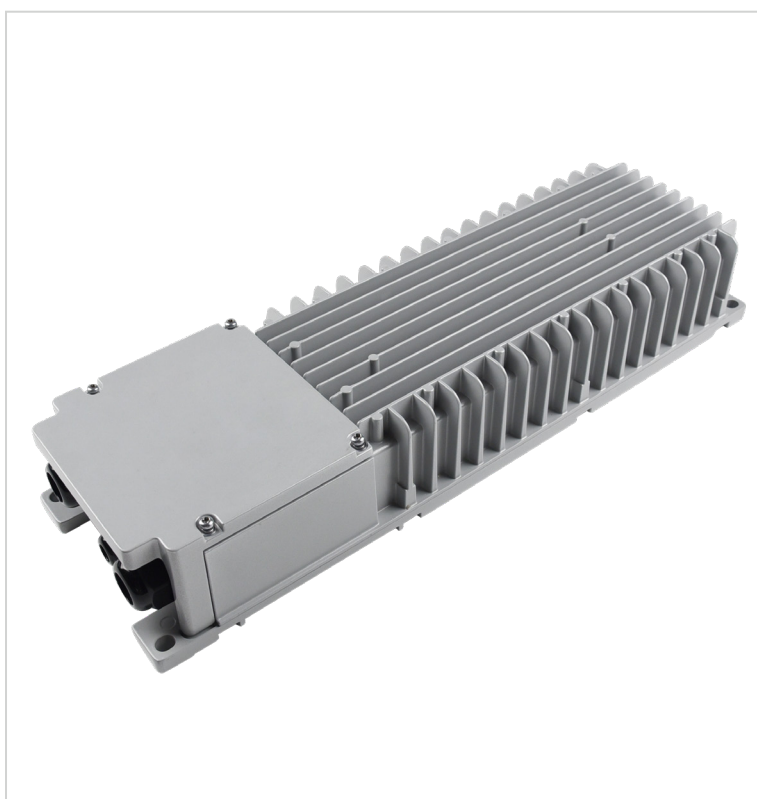
Product Code	Description	Voltage (V)	Control	IP Rating	Operating Ambient (°C)	Weight (Kg)	Dimensions LxWxH (mm)
HYB1ST240V	G/TRAY HYBRID 1420W 240V 1 STP RAPTOR 2/3/4 BRITELINE 1/2	240	1 Step (50%)	20	65	17.5	400 x 152 x 158
HYB1ST415V	G/TRAY HYBRID 1420W 415V 1 STP RAPTOR 2/3/4 BRITELINE 1/2	415	1 Step (50%)	20	65	17.5	400 x 152 x 158
HYB4ST240V	G/TRAY HYBRID 1420W 240V 4 STP RAPTOR 2/3/4 BRITELINE 1/2	240	4 Step (Nom 15%, 25%, 50%, 100%)	20	65	18.5	480 x 152 x 158
HYB4ST415V	G/TRAY HYBRID 1420W 415V 4 STP RAPTOR 2/3/4 BRITELINE 1/2	415	4 Step (Nom 15%, 25%, 50%, 100%)	20	65	18.5	480 x 152 x 158
HYBD240V	G/TRAY HYBRID 1420W 240V DALI RAPTOR 2/3/4 BRITELINE 1/2	240	TRI Control (DALI, 0-10V, Simple Switch)	20	65	20.5	480 x 152 x 158
HYBD415V	G/TRAY HYBRID 1420W 415V DALI RAPTOR 2/3/4 BRITELINE 1/2	415	TRI Control (DALI, 0-10V, Simple Switch)	20	65	20.5	480 x 152 x 158
HYB1ST240VIP65	W/P BOX HYBRID 1420W 240V 1 STP RAPTOR 2/3/4 BRITELINE 1/2	240	1 Step (50%)	65	50	20.5	426 x 235 x 285
HYB1ST415VIP65	W/P BOX HYBRID 1420W 415V 1 STP RAPTOR 2/3/4 BRITELINE 1/2	415	1 Step (50%)	65	50	20.5	426 x 235 x 285

ACCESSORIES

Product Code	Name	Voltage (V)
PSU-003-A1	220-430VAC/12 DC Dim Signal PSU	240/415

# ELECTRONIC CONTROL GEAR

## 1.8KW DALI-2. Suitable for RAPTOR 4



- Nominal input voltage: 220-415Vac
- 3 output channels
- Output current 1400 mA (per output channel)
- 6C+E cable between driver and luminaire
- DALI-2 and D4i Certified
- Output voltage range 176 – 500 VDC (per output channel)
- Max remote distance 300 meters
- Surge level 10 kV for both common mode and differential mode
- Adaptable thermal protection for LED Modules
- Lifetime: 115,000 hours (220Vac input, 80% load, 70°C case temperature)
- Short circuit, over voltage and over power protections
- IP66 enclosure

Class I non-insulated, 1800W (600W x 3 channels) output constant current DALI-2 programmable. An IP66 enclosure makes it also suitable for outdoor applications and its electrical characteristics make it suitable for TV broadcasting applications.

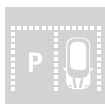


IK 08

IP 66



SPORTS



CAR PARKS



LARGE  
AREAS

GENERAL INFORMATION

RCM Mark	Yes
ROHS compliant	Yes
Testing standard	AS/NZS 61347.1:2016 AS 61347.2.13:2018
Electromagnetic compatibility (EMC)	AS/NZS CISPR15

HOUSING AND FINISH

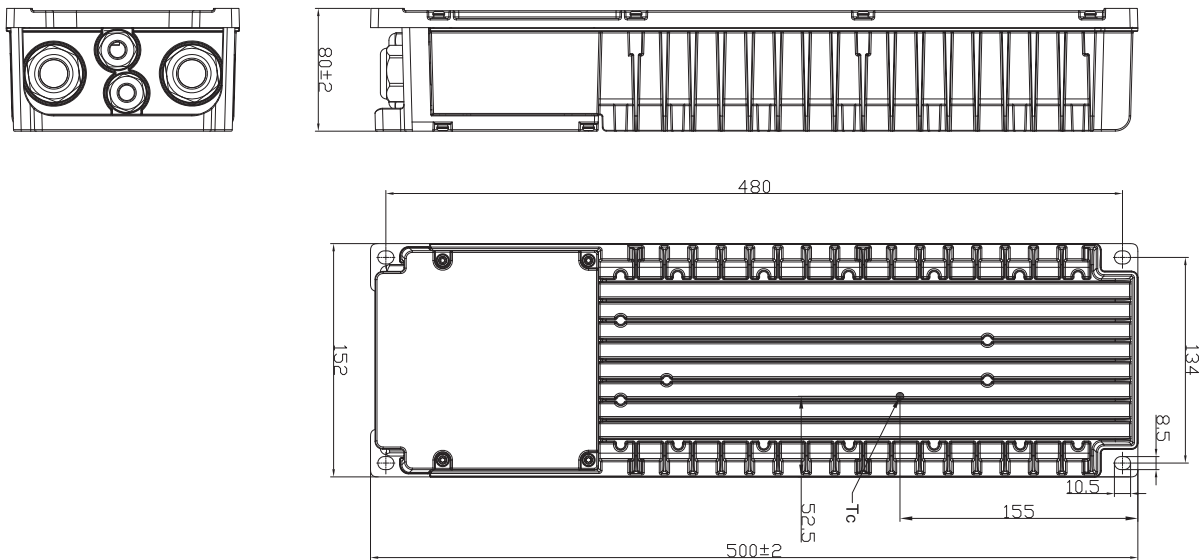
Housing	Die cast EN AC-44300 Aluminium alloy
Housing finish	Powder coated finish
Standard colour(s)	Pantone 877U
Tightness level	IP66
Impact resistance	IK08

DIMENSIONS AND MOUNTING

L x W x H (mm)	500 x 152 x 80 mm
Weight (kg)	6.4

ELECTRICAL INFORMATION

Electrical class	Class I
Nominal voltage	220-415 Vac – 50Hz/60Hz
Power factor (at full load)	> 0.95
Surge protection (kV)	10kV
I/O Connections	Push-down connectors Input Connections: L1, L2, PE Control Connections: DA+, DA-, (double connection for DALI line for re-launch) Output connections (LED+, LED-) x 3 channels + PE lum + OTP



ORDER CODES

Product Code	Description	Wattage (KW)	Control	IP Rating	Voltage (V)	Weight (kg)	Dimensions LxWxH(mm)
NFS-1K8T210BC	RAPTOR 4 ELECTRONIC DRIVER 3 CHANNEL 1.4A	1.8	DALI-2	IP66	220-415	6.4	500x152x80