



# LL18.650 TECHNICAL SPECIFICATION & FEATURES



#### INTRODUCTION

Developed for increased lifting capacity, reliability, versatility and as a long term investment, the LL18.650 has the capability and working envelope to suit almost all working situations.

This model meets the superior Australian Standard for mobile elevated work platforms and is constructed for durability and a long service life. The LL18.650 features a maximum lifting capacity of 650kg at the boom tip for lifting conductors and equipment.

A robust construction made to withstand the harsh Australian environment, the MEWP has been designed with serviceability in mind, sharing common components with other GMJ models to ensure spare parts are readily available.

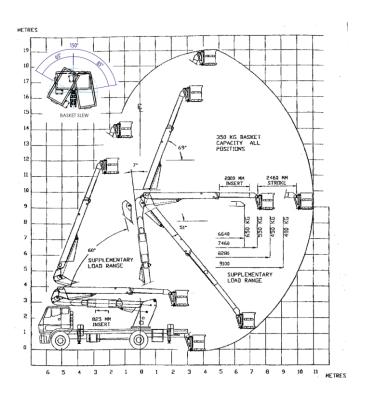
The articulated boom configuration features a 2.5m extension boom. For protection against electrical hazards, the unit features a 33kV chassis insulator and a 132kV insert in the telescopic boom. Furthermore, the special coating applied to the fibreglass surfaces on the inside and outside of the components permits 33kV wet protection throughout the life cycle of the unit.



For more information please visit www.gmj.com.au

Proudly designed and manufactured in Australia

# **TECHNICAL SPECIFICATION & FEATURES**



OPERATING SPECIFICATION			
Model	LL18-650		
Boom configuration type	Articulated / telescopic		
Safe working load	350 kg	S	
→ With basket rotator	350 kg	0	
Combined boom / basket SWL	400 kg – Boom extended	S	
	650 kg – Boom retracted		
Basket construction	Fibreglass - Flame retardant to ASTM D635		
Working height	19.5 m		
Floor height	18.0 m		
Reach	11.5 m		
Relevant conformance standard	AS/NZS 1418.10:2011 – Mobile elevating work platforms		
Cab chassis min. requirement	5.0 m, 14,000 kg GVM		

OPERATING SPECIFICATION	N CONT.	
Mass of unit includ. tray body	7,500 kg – Approx	
Travel height	3.7 m - Approx	
→ Insulation specif	ICATION	
Chassis insulation rating	33 kV - Dry	S
	33 kV - Wet	0
Basket operator insulation rating	132 kV - Dry	S
	33 kV - Wet	0
Chassis insulation effective length	0.83 m	
Basket operator insulation effective length	2.0 m	
Low voltage insulation	All metallic portions about 4.5 m	
ightarrow Stabilisation		
Front type	Hydraulic in/out – up/down	
Rear type	Hydraulic in/out – up/down	
Automatic stabilisation	Automatic stow/engage & level at the touch of a button	0
Max. stabiliser spread	4.4 m	
Ground penetration	0.25 m	S
	0.40 m	0
Max. operating chassis slope	±5°	
Max. stabiliser load	100 kN (10,000 kg) – Per pad	
Max. operating wind speed	12.5 m/s (45 km/h)	
Level indicators	3 off visible at stabiliser controls	S
→ BOOM PERFORMAN	CE	
Slew	Continuous 360°	
Lower boom	1.5° → 75°	
Upper boom	-51° → 69°	
Extension boom	2.5 m stroke	

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#### **TECHNICAL SPECIFICATION & FEATURES**

OPERATING SPECIFICATION CONT.		
ightarrow Boom speeds		
Slew ±360°	90 – 100 sec	
Lower boom – Raise/lower	35 – 45 sec	
Upper boom – Raise/lower	60 – 70 sec	
Extend – In/out	30 – 45 sec	
ightarrow Safety features		
Emergency stops	Emergency stops located at all control locations with indication light to illustrate when active	S
Over centre valves	O/centre valves fitted to all cylinders to prevent unintended movement in the unlikely event of hydraulic hose failure	S
Basket tilt	Basket tilt function to allow retrieval of injured personnel in the event of emergency use	S
Boom/Stabiliser interlock	Boom/stabiliser interlock to prevent the operation of the booms without the stabilisers safely engaged	S
Basket tie down interlock	Prevents the ability to pack up the stabiliser legs unless the basket is correctly tied down and the boom fully stowed	0
Back-up retrieval systems	Auxiliary manual controls located at the base	S
	Electro-hydraulic power pack	S
	Hand pump back-up for all booms and stabilisers	S
	Manual bleed down screws fitted to cylinders for manual retrieval	S
	Controlled decent devices fitted to the basket for each operator	S

#### **FACTORY OPTIONS**

FACTORY OPTIONS		
ightarrow Motion controls		
Basket controls	Pilot pressure joystick	S
→ Radio remotes (Single)	Autec	0

FACTORY OPTIONS CONT		
→ Radio remotes (Dual)	Remote option also available in dual controls	0
Basket slew control	Inbuilt into remote & basket controls	0
Auxiliary base controls	Manual controls located at the pivot frame	S
	Spool positioning	0
Stabiliser controls	Location customer specific	S
Engine stop / start	Located at the basket & pivot frame (other locations avail.)	S
ightarrow Basket		
Basket construction	Fibreglass - Flame retardant to ASTM D635	S
	Non-slip grit type on internal/external access steps	S
Basket size (internal)	1.2 m (wide) x 0.7 m (long) x 1.0 m (high)	0
	1.35 (wide) x 0.65m (long) x 1.0m (high)	S
	1.5 m (wide) x 0.7 m (long) x 1.0 m (high)	0
Basket articulation	0° - Fixed	S
	150° - Helical rotary actuator	0
Basket liner	Flame retardant to ASTM D635 - Includes 2 internal access steps	0
Basket accessories	Lifting jib attachment - 150 kg SWL	0
	Ribbed vinyl basket cover	0
	Fibreglass removable tool tray	0
→ HYDRAULICS		
Hydraulic circuit	Closed centre	0
	Open centre	S
Hydraulic operating pressure	17 MPa	S
Hydraulic pilot pressure	3.5 MPa	S
PTO & Pump (Gear type)	Single displacement - Single (Closed centre)	S
	Single displacement - Tandem (Hydraulic tools)	0
Accumulator size (Closed centre)	37L	S
	50L	0
Hydraulic tank	185L - Capacity	S
	Sight glass with temperature gauge	S

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#### **FACTORY OPTIONS**

FACTORY OPTIONS CONT.		
Pressure filter	10 micron	S
	3 micron	0
Return filter	10 micron	S
Hydraulic oil related options	Water separator	0
	Oil cooler radiator with fan	0
	Temperature alarm	0
$\rightarrow$ HYDRAULIC TOOLS		
Fitting type	Flush face	0
	Bayonet	0
Intensifier	Located at the basket	0
Hydraulic tools pressure filter	10 micron (Standard on Open Centre circuit)	0
	3 micron	0
ightarrow Motion systems		
Slew interlock	Single side operation with stabilisers retracted one side	Х
Capacity interlock	Telescopic function restricted with stabiliser legs retracted and engaged	Х
Traffic alarm	Warning buzzer when boom moves into traffic area	0
Out of level alarm	Buzzer active when chassis is greater than $\pm  5^{\circ}$ in either plane	0
Remote holder alarm	Buzzer active when radio remotes are not in holder when PTO is deactivated	0
→ BODY DETAIL		
Tray deck	Chequer plate - Steel	S
	Grid mesh - Steel	0
	Aluminium clip-lock	0
Deck access	Fixed step	S
	Single fold up step	0
	Double fold up steps	0
	Fold up steps/ladder	0

Mud guards         Steel         S           Aluminium (Tray deck material dependant)         S           Plastic bolt on         O           → BODY LIGHTING           Side clearance lights         LED type, 2 places         S           LED type, 4 places         O           Tail lights         LED type         S           Number plate light         LED type         S           Revolving lights         LED beacon – Small / large         O           Eventy in glights         LED beacon – Small / large         O           Customer specified         O           Work lights         LED spot light         O           Work lights         LED spot light         O           Work lights         LED spot light         O           Arrow light         LED spot/spread light combination         O           Arrow light         LED arrow stick         O           Arrow light         LED arrow stick         O           Arrow board - Type A (LED)         O           Arrow board - Type A (LED)         O           Locker lights         Oyster light - LED         O           Atrow board - Type B (LED)         O           LED strip         O      <	FACTORY OPTIONS CO	NT.		
Plastic bolt on O  → BODY LIGHTING  Side clearance lights LED type, 2 places S  LED type, 4 places O  Tail lights LED type S  Number plate light LED type S  Revolving lights LED beacon – Small / large O  LED flasher O  Customer specified O  Work lights LED spot light O  LED spot/spread light combination O  Remote LED search light O  Arrow light LED arrow stick O  Single arrow – Swing over O  Arrow board - Type A (LED) O  LED strip O  LED strip O  LED type - Fitted to all access step areas O  INDICATION LIGHTING  Exterior indication lighting Boom not stowed S  S  S  CED type, 2 places S  S  S  Arrow Board - Splaces S  S  S  Arrow LED type - Fitted to all access step areas O  Basket not tied down O	Mud guards	Steel	S	
Side clearance lights  LED type, 2 places  LED type, 4 places  O Tail lights  LED type  S Number plate light  LED beacon – Small / large  O Strobe  Customer specified  O Work lights  LED spot light  LED spot light  O LED spot/spread light combination  Remote LED search light  O Arrow light  LED arrow stick  O Single arrow – Swing over  Double ended arrow  Arrow board - Type B (LED)  O Cuscker lights  O Customer Specified  O D Customer Specified  O Customer		Aluminium (Tray deck material dependant)	S	
Side clearance lights         LED type, 2 places         S           LED type, 4 places         0           Tail lights         LED type         S           Number plate light         LED type         S           Revolving lights         LED beacon – Small / large         0           LED flasher         0           Customer specified         0           Work lights         LED spot light         0           LED spread light         0           LED spread light combination         0           Remote LED search light         0           Arrow light         LED arrow stick         0           Single arrow – Swing over         0           Double ended arrow         0           Arrow board - Type A (LED)         0           Arrow board - Type B (LED)         0           Locker lights         Oyster light - LED         0           Step lights         LED type - Fitted to all access step areas         0           HNDICATION LIGHTING         Exterior indication lighting         Boom not stowed         S		Plastic bolt on	0	
LED type, 4 places         O           Tail lights         LED type         S           Number plate light         LED type         S           Revolving lights         LED beacon – Small / large         O           LED flasher         O           Customer specified         O           Work lights         LED spot light         O           LED spread light         O           LED spread light combination         O           Remote LED search light         O           Arrow light         LED arrow stick         O           Arrow light         LED arrow stick         O           Double ended arrow         O         O           Arrow board - Type A (LED)         O           Arrow board - Type B (LED)         O           Locker lights         Oyster light - LED         O           LED strip         O           Step lights         LED type - Fitted to all access step areas         O           HNDICATION LIGHTING         Exterior indication lighting         Boom not stowed         S           Basket not tied down         O	→ BODY LIGHTING			
Tail lights         LED type         S           Number plate light         LED type         S           Revolving lights         LED beacon – Small / large         O           Strobe         O           LED flasher         O           Work lights         LED spot light         O           Work lights         LED spot light         O           LED spread light combination         O           Remote LED search light         O           Arrow light         LED arrow stick         O           Single arrow – Swing over         O           Double ended arrow         O           Arrow board - Type A (LED)         O           Arrow board - Type B (LED)         O           LeD strip         O           Step lights         LED type - Fitted to all access step areas         O           → INDICATION LIGHTING         Exterior indication lighting         Boom not stowed         S           Basket not tied down         O	Side clearance lights	LED type, 2 places	S	
Number plate light LED type S   Revolving lights LED beacon – Small / large O   Strobe O   LED flasher O   Customer specified O   Work lights LED spot light O   LED spread light O   LED spread light combination O   Remote LED search light O   Arrow light LED arrow stick O   Single arrow – Swing over O   Double ended arrow O   Arrow board - Type A (LED) O   Arrow board - Type B (LED) O   Locker lights Oyster light - LED O   Step lights LED type - Fitted to all access step areas O   → INDICATION LIGHTING Exterior indication lighting Boom not stowed S   Exterior indication lighting Boom not stowed S		LED type, 4 places	0	
Revolving lights LED beacon – Small / large O   Strobe O   LED flasher O   Customer specified O   Work lights LED spot light O   LED spread light O   LED spread light combination O   Remote LED search light O   Arrow light LED arrow stick O   Single arrow – Swing over O   Double ended arrow O   Arrow board - Type A (LED) O   Arrow board - Type B (LED) O   Locker lights Oyster light - LED O   Step lights LED strip O   Step lights LED type - Fitted to all access step areas O   → INDICATION LIGHTING   Exterior indication lighting Boom not stowed S   Exterior indication lighting Boom not stowed S	Tail lights	LED type	S	
Strobe  LED flasher  Customer specified  O  Work lights  LED spot light  DED spot/spread light combination  Remote LED search light  O  Arrow light  LED arrow stick  Single arrow – Swing over  Double ended arrow  Arrow board - Type A (LED)  Arrow board - Type B (LED)  Coker lights  Oyster light - LED  Step lights  LED strip  O  Step lights  LED type - Fitted to all access step areas  O  Exterior indication lighting  Boom not stowed  So  Basket not tied down  O	Number plate light	LED type	S	
LED flasher Customer specified O Work lights LED spot light O LED spread light O LED spot/spread light combination O Remote LED search light O Arrow light LED arrow stick O Single arrow − Swing over O Double ended arrow O Arrow board − Type A (LED) O Arrow board − Type B (LED) O Locker lights Oyster light − LED LED strip O Step lights LED type − Fitted to all access step areas O  N INDICATION LIGHTING Exterior indication lighting Boom not stowed S Basket not tied down O	Revolving lights	LED beacon – Small / large	0	
Customer specified O   Work lights LED spot light O   LED spread light O   LED spot/spread light combination O   Remote LED search light O   Arrow light LED arrow stick O   Single arrow – Swing over O   Double ended arrow O   Arrow board - Type A (LED) O   Arrow board - Type B (LED) O   Locker lights Oyster light - LED O   Step lights LED type - Fitted to all access step areas O   → INDICATION LIGHTING S   Exterior indication lighting Boom not stowed S   Basket not tied down O		Strobe	0	
Work lights LED spot light O   LED spread light O   LED spot/spread light combination O   Remote LED search light O   Arrow light LED arrow stick O   Single arrow – Swing over O   Double ended arrow O   Arrow board - Type A (LED) O   Arrow board - Type B (LED) O   Locker lights Oyster light - LED O   Step lights LED strip O   Step lights LED type - Fitted to all access step areas O   → INDICATION LIGHTING S   Exterior indication lighting Boom not stowed S   Basket not tied down O		LED flasher	0	
LED spread light O   LED spot/spread light combination O   Remote LED search light O   Arrow light LED arrow stick O   Single arrow – Swing over O   Double ended arrow O   Arrow board - Type A (LED) O   Arrow board - Type B (LED) O   Locker lights Oyster light - LED O   Step lights LED strip O   Step lights LED type - Fitted to all access step areas O   → INDICATION LIGHTING S   Exterior indication lighting Boom not stowed S   Basket not tied down O		Customer specified	0	
LED spot/spread light combination O   Remote LED search light O   Arrow light LED arrow stick O   Single arrow – Swing over O   Double ended arrow O   Arrow board - Type A (LED) O   Arrow board - Type B (LED) O   Locker lights Oyster light - LED O   LED strip O   Step lights LED type - Fitted to all access step areas O   → INDICATION LIGHTING S   Exterior indication lighting Boom not stowed S   Basket not tied down O	Work lights	LED spot light	0	
Remote LED search light O   Arrow light LED arrow stick O   Single arrow – Swing over O   Double ended arrow O   Arrow board - Type A (LED) O   Arrow board - Type B (LED) O   Locker lights Oyster light - LED O   Step lights LED type - Fitted to all access step areas O   → INDICATION LIGHTING S   Exterior indication lighting Boom not stowed S   Basket not tied down O		LED spread light	0	
Arrow light  LED arrow stick  Single arrow – Swing over  Double ended arrow  Arrow board - Type A (LED)  Arrow board - Type B (LED)  Cocker lights  Oyster light - LED  LED strip  OStep lights  LED type - Fitted to all access step areas  OHDICATION LIGHTING  Exterior indication lighting  Boom not stowed  S  Basket not tied down  O  O  O  O  Single arrow stick  O  Arrow board - Type B (LED)  O  Arrow board - Type B (LED)  O  Arrow board - Type B (LED)  O  Step lights  Arrow board - Type B (LED)  O  Arrow board - Type B (LED)  O  Arrow board - Ty		LED spot/spread light combination	0	
Single arrow – Swing over  Double ended arrow O Arrow board - Type A (LED) O Arrow board - Type B (LED) O Locker lights Oyster light - LED O Step lights LED strip O Step lights LED type - Fitted to all access step areas O → INDICATION LIGHTING Exterior indication lighting Boom not stowed S Basket not tied down O		Remote LED search light	0	
Double ended arrow O   Arrow board - Type A (LED) O   Arrow board - Type B (LED) O   Locker lights Oyster light - LED O   LED strip O   Step lights LED type - Fitted to all access step areas O   → INDICATION LIGHTING   Exterior indication lighting Boom not stowed S   Basket not tied down O	Arrow light	LED arrow stick	0	
Arrow board - Type A (LED)  Arrow board - Type B (LED)  Cocker lights  Oyster light - LED  LED strip  O  Step lights  LED type - Fitted to all access step areas  O  → INDICATION LIGHTING  Exterior indication lighting  Boom not stowed  S  Basket not tied down  O		Single arrow – Swing over	0	
Arrow board - Type B (LED)  Locker lights Oyster light - LED  LED strip O  Step lights LED type - Fitted to all access step areas O  → INDICATION LIGHTING  Exterior indication lighting Boom not stowed S  Basket not tied down O		Double ended arrow	0	
Locker lights       Oyster light - LED       O         LED strip       O         Step lights       LED type - Fitted to all access step areas       O         → INDICATION LIGHTING         Exterior indication lighting       Boom not stowed       S         Basket not tied down       O		Arrow board - Type A (LED)	0	
LED strip     O       Step lights     LED type - Fitted to all access step areas     O       → INDICATION LIGHTING       Exterior indication lighting     Boom not stowed     S       Basket not tied down     O		Arrow board - Type B (LED)	0	
Step lights     LED type - Fitted to all access step areas     O       → INDICATION LIGHTING       Exterior indication lighting     Boom not stowed     S       Basket not tied down     O	Locker lights	Oyster light - LED	0	
→ INDICATION LIGHTING  Exterior indication lighting Boom not stowed S  Basket not tied down O		LED strip	0	
Exterior indication lighting Boom not stowed S  Basket not tied down O	Step lights	LED type - Fitted to all access step areas	0	
Basket not tied down O	→ INDICATION LIGH	→ Indication lighting		
	Exterior indication lighting	Boom not stowed	S	
Stabiliser legs out S		Basket not tied down	0	
		Stabiliser legs out	S	

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# **FACTORY OPTIONS**

Emergency stop active  Boom stow light – Located on pivot frame  Cabin indication lighting  PTO Engaged  PTO / truck hour meter  Stabiliser not stowed  Boom not stowed  Step/vice not stowed  Locker door open  Pressure filter clogged (indicator on filter as standard)  Return filter clogged  Step lights on  → POWER MANAGEMENT	s s o
Boom stow light – Located on pivot frame  Cabin indication lighting  PTO Engaged  PTO / truck hour meter  Stabiliser not stowed  Boom not stowed  Step/vice not stowed  Locker door open  Pressure filter clogged (indicator on filter as standard)  Return filter clogged  Step lights on  POWER MANAGEMENT	_
Cabin indication lighting PTO Engaged  PTO / truck hour meter  Stabiliser not stowed  Boom not stowed  Step/vice not stowed  Locker door open  Pressure filter clogged (indicator on filter as standard)  Return filter clogged  Step lights on  → POWER MANAGEMENT	0
PTO / truck hour meter  Stabiliser not stowed  Boom not stowed  Step/vice not stowed  Locker door open  Pressure filter clogged (indicator on filter as standard)  Return filter clogged  Step lights on  POWER MANAGEMENT	
Stabiliser not stowed  Boom not stowed  Step/vice not stowed  Locker door open  Pressure filter clogged (indicator on filter as standard)  Return filter clogged  Step lights on  → POWER MANAGEMENT	S
Boom not stowed  Step/vice not stowed  Locker door open  Pressure filter clogged (indicator on filter as standard)  Return filter clogged  Step lights on  POWER MANAGEMENT	S
Step/vice not stowed  Locker door open  Pressure filter clogged (indicator on filter as standard)  Return filter clogged  Step lights on  → POWER MANAGEMENT	S
Locker door open  Pressure filter clogged (indicator on filter as standard)  Return filter clogged  Step lights on  → POWER MANAGEMENT	0
Pressure filter clogged (indicator on filter as standard)  Return filter clogged  Step lights on  → POWER MANAGEMENT	0
Return filter clogged  Step lights on  → POWER MANAGEMENT	0
Step lights on   → POWER MANAGEMENT	0
→ POWER MANAGEMENT	0
	0
Dual batteries Dual battery system	
	S
Autonomous management system of the dual batteries, includes a start assist button in the cab for additional truck cranking power	0
Inverter Customer specified C	0
→ Tow bar	
Type Pintle 0	0
Pintle & ball	0
Capacity 4,500 kg	0
8,000 kg	0
Height Customer specific	-
Plug 7 pin round - Small	0
7 pin round - Large	0
→ PAINT & FINISHING	
All components painted using 2 pack paint	S
Booms Polished GRP - White	S
Ultra reflective red/white diamond tape safety stripes at knuckle	S
→ Steel work White gloss	

FACTORY OPTIONS CONT	r.	
Tray body	Black gloss	S
→ Special	Special customer specific paint detail available	0
Hand rail	White gloss	S
	Yellow gloss	0
Access steps	White gloss	S
	Yellow gloss	0
Stabiliser legs	White gloss	S
	Ultra reflective red/white diamond tape safety stripe	S
Oil tank	White gloss	S
Boom rest	Black gloss	S
Basket	Ultra reflective red/white diamond tape safety stripe	S
Access steps	Non-slip grit strip on all steps	S

# **FACTORY FITTED ACCESSORIES**

FACTORY FITTED ACCESSORIES			
→ LOCKERS			
Material	White powder coat 1.6 mm zinc anneal construction with field proven design to prevent water ingress	S	
	3 mm aluminium, powder coated or raw	0	
Internals	Fully customisable to customer specification	-	
Features	Stainless steel lockable T-handles	S	
	Stainless steel hinges	S	
Options	Central locking	0	
	Roller doors	0	
	Hydraulic lift door	0	
→ ALTERNATIVE STORAGE			
	Sign racks, ladder racks, rubbish bins, roof protector etc can be fitted as per customer specification	0	

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#### **FACTORY FITTED ACCESSORIES**

#### FACTORY FITTED ACCESSORIES CONT. → CAB CHASSIS ACCESSORIES In cab operator terminal screen: Control MEWP functions and accessories Live monitoring & data logging 0 Operator terminal screen Diagnose & fault-finding tool Service information & reminders Plant certificates & manuals Trouble shooting menu A central tyre inflation system which allows the operator to 0 Tyre pressure management control and monitor the air pressure in the tyres → MISCELLANEOUS ACCESSORIES Stabiliser pads Timber with rope grab handle 0 0 Plastic moulded 0 High impact polyethylene 0 Fire extinguisher Wet - 9.0 kg 0 Dry - 4.5 kg 0 Dry - 9.0 kg Water tank 15L including soap dispenser 0 50L 0 Witches hat holder On deck or under deck 0 0 Vice 100 mm fixed or slide out engineer's vice 0 Knap sack 16L with holder 0 20L with holder Cable drum carrier Electroplated, 100 kg SWL 0 0 Recovery points Rear recovery hooks 0 Spare wheel carrier On deck or under deck 0 Wheel chocks Rubber complete with grab handle and holder 0 Farth chain 16 mm chain link 0 Oil tank drain cock Mounted to either side of the tray body 0 Spill kit Oil & fuel spill kit supplied loose

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Please contact GMJ Equipment regarding options not listed in this document

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