YUASA

by GS YUASA

Industrial battery range

VRLA, Li-ion, NiCd, NiMH & accessories range overview

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The world's leading battery manufacturer

BATTERY
YUASA
TRADE MARK

YUASA BATTERY



100 YEARS OF QUALITY, RELIABILITY & PERFORMANCE

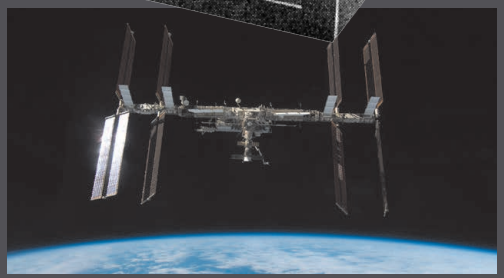
- Over 100-year pedigree, founded in 1918
- UK market leader for vehicle & industrial batteries
- Engineered for long life & maximum power
- The largest vehicle coverage from one brand

Join the millions of people who enjoy the long service life, high performance and exceptional reliability provided by Yuasa, the world's leading battery manufacturer.









GS Yuasa Battery Europe

For over 40 years, GS Yuasa Battery Europe Ltd have been Europe's leading battery supplier.

From sales and distribution centres in the UK, Italy, Spain, France, Sweden and Germany, GS Yuasa supply European markets with an extensive range of high-quality energy storage and network stabilisation solutions.

Our award-winning products, service and supply lead the industry and continue to set new standards of customer care, quality, choice and year-round availability.

A GS Yuasa company

GS Yuasa are the world's leading battery manufacturer and global leader for quality and innovation.

The GS Yuasa Group consists of 65 subsidiaries and 33 affiliates in countries throughout the world.

For over 100 years GS Yuasa has continually created advanced stored energy solutions under the philosophy of "innovation and growth", and established itself as the number one choice for vehicle and industrial batteries.

GS Yuasa batteries are used in a wide range of applications from the Shinkai deep sea submarine, to the Boeing 787 Dreamliner aircraft and International Space Station... and everything in between.

A UK manufacturer

Production began at GS Yuasa's manufacturing plant in Ebbw Vale, UK in 1981.

Manufacturing Yuasa NPL, EN, ENL and SWL battery ranges, well over 85 million batteries have been produced since the factory opened.

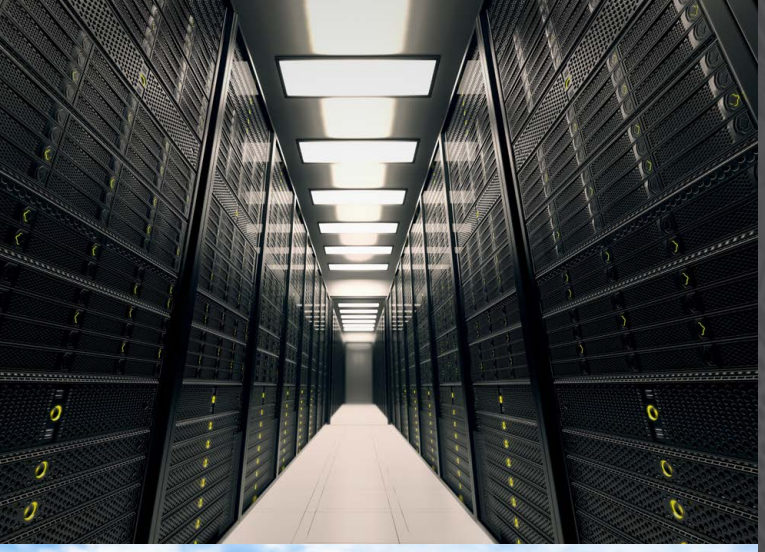


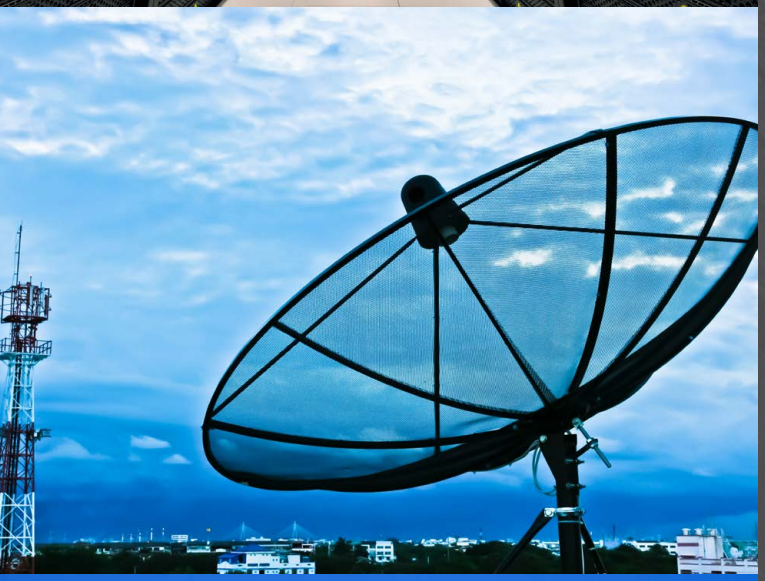
















Common **applications**

Uninterruptible power supply (UPS)

Ranging in size from desk top units to large plant room installations, UPSs are a no-break backup power supply for essential equipment. Yuasa batteries can be sized to give the autonomy and load required for any project.

Batteries typically used:

NP	**NPW**	**SW**	**EN**	**FXH**
NPL	**RE**	**SWL**	**ENL**	**SLR**
NPH	**REW**	**SWL+**	**ENL FT**	**Lithium**

Telecoms

Broadband, landline and mobile providers have equipment that needs battery backup power in the event of a mains failure. Whether in central systems or remote cabinets, Yuasa batteries are trusted by providers worldwide.

Batteries typically used:

NP	**RE**	**SWL**	**ENL**	**SLR**
NPL	**REW**	**SWL+**	**ENL FT**	
NPW	**SW**	**EN**	**FXH**	

Renewable energy

Solar, wind and wave energy is not always produced at times of maximum requirement. Yuasa batteries allow energy to be stored at times of low demand and then released into the grid when demand is high.

Batteries typically used:

NP	**NPC**	**ENL**	**FXH**	**Lithium**
NPL	**REC**	**ENL FT**	**SLR**	

Fire & security

Even the most advanced security systems are only as good as the backup batteries supporting them. When an emergency arises, Yuasa standby batteries can protect homes and businesses against crime and fire.

Batteries typically used:

NP	**NPL**	**RE**



Golf & mobility

Golf and mobility equipment requires batteries to be charged and then used to power the equipment. Yuasa produce specialised cyclic battery types to give maximum performance for hundreds of charge/discharge cycles.

Batteries typically used:

NPC **REC**

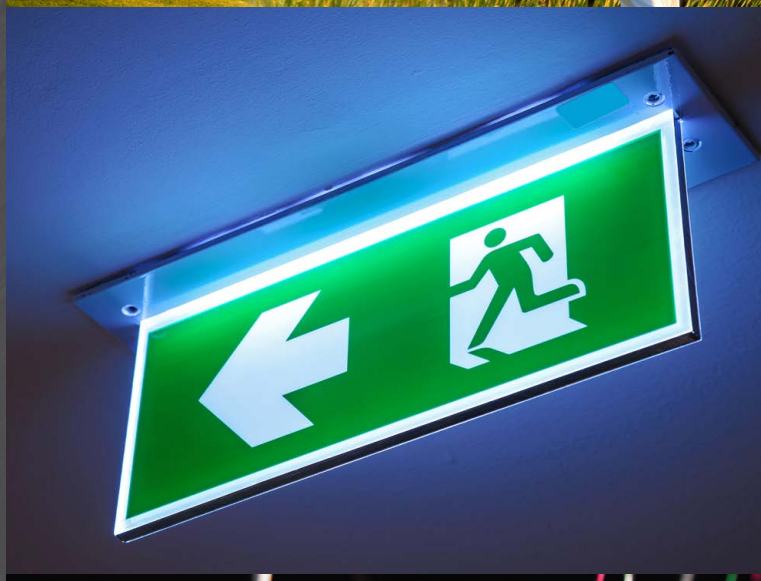


Emergency lighting

Emergency lighting is required in commercial buildings. In the event of a mains failure, standby batteries provide light for safe evacuation. Yuasa NiCd, NiMH and VRLA batteries exceed common 3 hour run-time requirements.

Batteries typically used:

NiMh **NPL** **REC**
NiCd **NPC** **ENL**
NP **RE** **ENL FT**

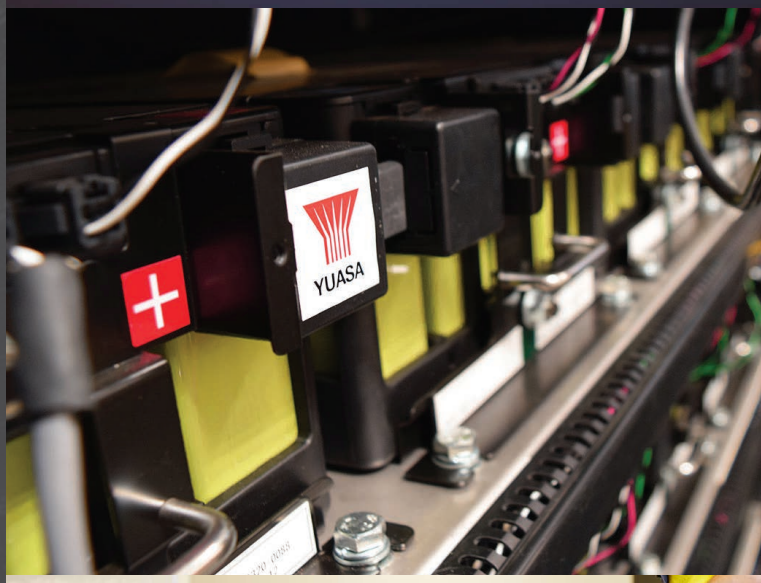


Energy storage

Businesses are usually charged on peak power demand. Load-shedding allows large cost savings by charging batteries during low demand and injecting this stored energy back into business load at times of high demand.

Batteries typically used:

NPL **REC** **ENL FT** **Lithium**
NPC **ENL** **FXH** **SLR**



Floor cleaning & aerial access

A specialist battery solution is needed for applications where deep discharges and harsh operating conditions are common, the GS Yuasa Pro-Spec range have excellent resilience against plate corrosion and deep discharge.

Batteries typically used:

Pro-Spec





Yuasa industrial **batteries**

To help with battery selection, and due to different application and operational requirements, every Yuasa industrial battery has been designated with a Eurobat classification or Yuasa cyclic life tag.

Eurobat is a European organisation that has produced a guide to VRLA batteries. Within this guide there are four design life categories. Yuasa has used the test methods as set out in an official standard, BS EN60896-21/21 to designate each battery range into one of the categories.



3 to 5 year EUROBAT classification

Standard Commercial

NP series page 8

- 6 & 12 Volt types
- 1Ah to 65Ah
- Standby & light cyclic use
- Guaranteed capacity
- Yuasa quality assurance

UPS



6 to 9 year EUROBAT classification

General Purpose

RE series page 9

- Guaranteed capacity
- Yuasa quality assurance
- 12 Volt
- 5Ah to 12Ah
- Standby & light cyclic use

UPS



10 to 12 year EUROBAT classification

Long Life

NPL series page 10

- 6 & 12 Volt types
- 24Ah to 200Ah
- Standby use

UPS



Over 12 year EUROBAT classification

Very Long Life

FXH series page 11

- 12 Volt
- 45Ah to 200Ah
- Standby use



10 to 12 year EUROBAT classification

Long Life

SWL series page 12

- 6 & 12 Volt types
- 24Ah to 180Ah
- Standby use

UPS



Over 12 year EUROBAT classification

Very Long Life

SWL+ series page 13

- 6 & 12 Volt types
- 24Ah to 180Ah
- Standby use

UPS



Over 12 year EUROBAT classification

Very Long Life

EN series page 14

- 2, 4 & 6 Volt types
- 80Ah to 540Ah
- Standby use

UPS



Over 12 year EUROBAT classification

Very Long Life

ENL series page 15

- 2, 4, 6 & 12 Volt types
- 100Ah to 480Ah
- Standby use

UPS



up to 600 cyclic design life

REC series page 16

- 12 Volt
- 10Ah to 80Ah
- Cyclic use



up to 600 cyclic design life

NPC series page 17

- 12 Volt
- 24Ah to 100Ah
- Cyclic use



up to 30k cyclic design life

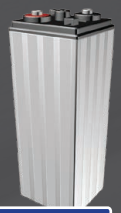
Lithium series page 18

- 24 to 48 Volt
- 30Ah to 50Ah
- Standby & cyclic use



YU-Lite page 24

- NiCd, NiMH & Lithium batteries
- Custom NiCd & NiMH solutions
- General use



up to 5500 cyclic design life

SLR series page 26

- 2 Volt
- 500Ah & 1000Ah
- Heavy duty cyclic use



over 500 cyclic design life

Pro-Spec page 27

- 6, 8 & 12 Volt types
- 150Ah to 260Ah
- Deep cyclic use



Accessories page

- Racking & site services 28
  Hioki BT3554 & GYT117 testers 29
- Temperature monitoring 30
- Yu-Power chargers 30

Eurobat classification or Yuasa cyclic design life assumes that the battery is operated in normal conditions at 20°C and in accordance with Yuasa recommended operating guidelines.

Yuasa cyclic design life assuming 50% depth of discharge.

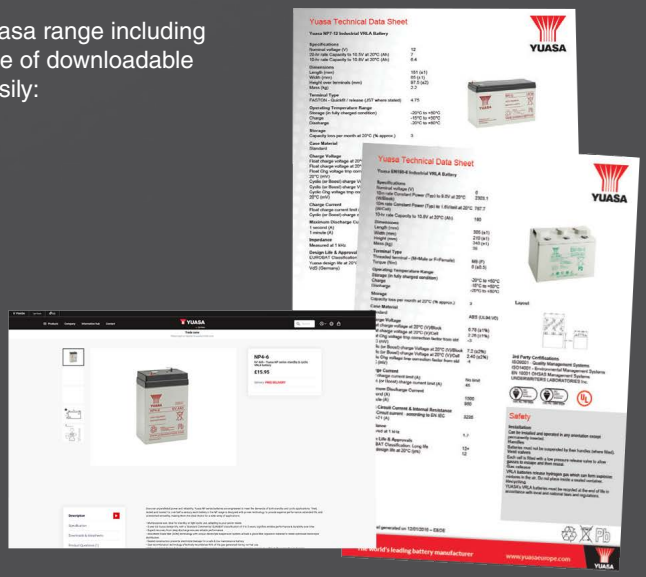


www.yuasa.com

Yuasa's innovative website is mobile-ready and features the entire Yuasa range including specifications, part numbers and photographs. It also includes a range of downloadable brochures, resources, data sheets and guides and allows users to easily:

- **Find the right battery and compare products**
- **Search for local distributors**
- **Access detailed technical information and guides**
- **Download dynamic technical data sheets**
- **Calculate UPS system size requirements**
- **Keep up to date with the latest from Yuasa**

Features every Yuasa industrial, automotive and motorcycle product with full specifications and pictures.



NP series

Valve regulated lead acid batteries



Features

- Lead calcium grids for extended life
- Superb recovery from deep discharge
- Low discharge rate for long shelf life
- Absorbed glass mat (AGM) technology assures no free electrolyte
- High gas recombination efficiency
- Multipurpose: Float or light cyclic use
- Can be used in any orientation excluding continuous inverted use

Applications

Suitable for a wide range of standby & cyclic applications including:

- Fire & security systems
- Emergency lighting
- Solar and wind
- UPS

3 to 5 year EUROBAT classification
Standard Commercial

Model name	Nominal Voltage (Volts)	Capacity		Watts per cell 10 min to 1.6VPC at 20˚C (watts)	Dimensions (mm)			Weight - typical (kg)	Impedance at 1kHz mOhms	1 Second rate (Amps)	Terminal type	Layout (see page 18)
		20-hr rate to 10.5V at 20˚C (Ah)	10-hr rate to 10.8V at 20˚C (Ah)		Length (±1)	Width (±1)	Overall height (±2)					
NP1-6	6	1	0.93	-	51	42.5	54.5	0.25	75	30	A	5
NP1.2-6	6	1.2	1.1	-	97	25	54.5	0.31	60	36	A	1
NP2.8-6	6	2.8	2.5	-	134	34	64	0.57	30	84	A	1
NP3-6	6	3	2.9	-	134	34	64	0.66	18	84	A	1
NP4-6	6	4	3.7	-	70	47	105.5	0.87	20	120	A	5
NP7-6	6	7	6.5	-	151	34	97.5	1.32	12	210	A	1
NP10-6	6	10	9.2	-	151	50	97.5	1.93	8	300	A	1
NP12-6	6	12	11.1	-	151	50	97.5	2.05	7	360	C	1
NP1.2-12	12	1.2	1.1	-	97	48	54.5	0.58	110	36	A	3
NP2.1-12	12	2.1	1.9	-	178	34	64	0.82	65	63	A	1
NP2.3-12	12	2.3	2.1	-	178	34	64	0.95	65	69	A	1
NP2.8-12	12	2.8	2.5	-	134	67	64	1.12	60	84	A	3
NP3.2-12	12	3.2	2.9	-	134	67	64	1.2	50	96	A	3
NP4-12	12	4	3.7	-	90	70	106	1.75	40	120	A	1
NP5-12	12	5	4.8	-	90	70	106	1.85	17.8	120	A/C	1
NP7-12(L)	12	7	6.4	-	151	65	97.5	2.2	23	210	A/C	4
NP12-12	12	12	11.1	-	151	98	97.5	4.05	16	360	C	4
NP17-12I	12	17	15.7	-	181	76	167	6.1	15	510	D	2
NP18-12B	12	17.2	16	-	180	76	167	6.2	15	540	G	2
NP24-12I	12	24	22.3	-	166	175	125	9	11	500	D	2
NP38-12I	12	38	35.3	-	197	165	170	14.2	9	500	D	2
NP65-12I	12	65	60.5	-	350	166	174	23	7	800	E	2
NPH & NPW Series High Rate NP Batteries												
NPH2-12FR	12	2.1	2	-	68	51	88	0.84	66	60	A	2
NPH5-12(FR)	12	5	4.8	34	90	70	106	1.85	25	150	C	1
NPH18-12B	12	20	18.7	115.2	181	76	167	6.3	7.9	540	G	2
NPW45-12	12	7.5	6.6	40	151	65	97.5	2.7	24	105	C	4

yuasa.co.uk/NP
For more information and technical data

RE series

Valve regulated lead acid batteries



UPS

Features

- Lead calcium grids for extended life
- Superb recovery from deep discharge
- Low discharge rate for long shelf life
- Absorbed glass mat (AGM) technology assures no free electrolyte
- High gas recombination efficiency
- Multipurpose: Float or light cyclic use
- Can be used in any orientation excluding continuous inverted use

Applications

Suitable for a wide range of standby & cyclic applications including:

- Fire & security systems
- Emergency lighting
- Solar and wind
- UPS

6 to 9 year EUROBAT classification
General Purpose

Model name	Nominal Voltage (Volts)	Capacity		Dimensions (mm)			Weight - typical (kg)	Impedance at 1kHz mOhms	1 Second rate (Amps)	Terminal type	Layout (see page 18)
		20-hr rate to 10.5V at 20°C (Ah)	10-hr rate to 10.8V at 20°C (Ah)	Length (±3)	Width (±3)	Overall height (±3)					
RE5-12	12	5	4.6	90	70	106	1.96	42	120	C	1
RE7-12L(FR)	12	7	6.2	151	65	97.5	2.75	35	105	C	4
RE12-12	12	12	10.56	151	98	97.5	4.15	15	180	C	4
HIGH RATE HR **REW45-12**	12	8	6.96	151	64	97.5	2.7	24	105	C	4

yuasa.co.uk/RE
For more information and technical data

Yuasa NP series

Europe's leading standby batteries





- ✓ European market leader for over 40 years
- ✓ Proven track record of long-life performance
- ✓ The original and most reliable NP VRLA battery
- ✓ Dependable standby & light cyclic power
- ✓ Yuasa quality, reliability & performance

NPL series

Valve regulated lead acid batteries



Features

- Low discharge rate for long shelf life
- Absorbed glass mat (AGM) technology assures no free electrolyte
- High gas recombination efficiency
- Flame retardant to UL94:HB
- FR option flame retardant to UL94:VØ (oxygen index 30)
- Manufactured in factories that comply with ISO 9001
- Complies with BS EN60896-21+22

Applications

- Fire & security
- Emergency lighting
- Telecoms
- UPS

10 to 12 year EUROBAT classification Long Life

Model name	Nominal Voltage (Volts)	Capacity		Watts per cell 10 min to 1.6VPC at 20°C (watts)	Dimensions (mm)			Weight - typical (kg)	Impedance at 1kHz mOhms	1 Second rate (Amps)	Terminal type	Layout (see page 18)	Torque (Nm)
		20-hr rate to 10.5V at 20°C (Ah)	10-hr rate to 10.8V at 20°C (Ah)		Length (±1)	Width (±1)	Overall height (±2)						
NPL24-12I (FR)	12	24	21.1	93.2	166	175	125	9	9.5	500	D	2	2.5
NPL38-12I (FR)	12	38	33.4	147.5	197	165	170	14	7.5	500	D	2	2.5
NPL65-12I (FR)	12	65	57.2	252.4	350	166	174	23	5	800	E	2	4.8
NPL78-12IFR	12	78	68.6	302.9	380	166	174	27.5	4.5	800	F	2	6
NPL100-12FR	12	100	88	388.4	407	172	240	39	4	1000	I	1	16.5
NPL130-6IFR	6	130	114.4	504.9	350	166	174	23	2.5	500	E	5	4.8
NPL200-6	6	200	176	776.8	398	176	250	39	1.3	1500	I	5	16.5

yuasa.co.uk/NPL
For more information and technical data



FXH series

Valve regulated lead acid batteries



Features

- Front terminal connection for ease of installation & maintenance
- Low discharge rate for long shelf life
- Absorbed glass mat (AGM) technology assures no free electrolyte
- High gas recombination efficiency
- Case material ABS flame retardant UL94:VØ
- BS EN60896-2 compliant

Applications

- UPS
- Telecoms
- Emergency lighting

Over 12 year EUROBAT classification Very Long Life

Model name	Nominal Voltage (Volts)	Capacity		Watts per cell 15 min to 1.6VPC at 20˚C (watts)	Dimensions (mm)			Weight - typical (kg)	Impedance at 1kHz mOhms	1 Second rate (Amps)	Terminal type	Layout (see page 18)	Torque (Nm) terminal / adaptor
		20-hr rate to 10.5V at 20˚C (Ah)	10-hr rate to 10.8V at 20˚C (Ah)		Length (±3)	Width (±3)	Overall height (±3)						
FXH45-12IFR	12	45	43.7	175	278	103	197	15	4.7	400	E/D	3	5.4/3
FXH90-12IFR	12	96.2	88	331	395	105	255	30	3.4	540	F/E	3	11.9/5.4
FXH100-12IFR	12	100.8	97	376	508	106	236	34.9	3.5	540	E/E	3	5.4/5.4
FXH100S-12IFR	12	107	97.4	384	395	106	290	34	3.5	600	F/E	3	11.9/5.4
FXH140-12IFR	12	165.8	151	560	556	123	295	51	2.7	540	F/E	3	11.9/5.4
FXH155-12IFR	12	167	152	483	415	174	258	50.5	2.8	930	E	3	5.4/N/A
FXH165-12IFR	12	191	172	574	556	125	317	56	2.8	990	F/E	3	11.9/5.4
FXH185-12IFR	12	197.8	183	627	556	125	317	60.7	2.5	1000	F/E	3	11.9/5.4
FXH190-12IFR	12	212	196	743	604	123	320	67	2.5	1000	F/E	3	11.9/5.4
FXH200-12IFR	12	238	216	803	520	243	230	70.6	2.1	1000	F	3	11.9/N/A

90° FXH terminal adaptors

for telecoms use

	Battery terminal	90˚ adaptor
FXH45-12IFR	M6	M5
FXH90-12IFR	M8	M6
FXH100-12IFR	M6	M6
FXH100S-12IFR	M8	M6
FXH140-12IFR	M8	M6
FXH155-12IFR	M6	N/A
FXH165-12IFR	M8	M6
FXH185-12IFR	M8	M6
FXH190-12IFR	M8	M6
FXH200-12IFR	M8	N/A

yuasa.co.uk/FXH
For more information and technical data





SWL series

Valve regulated lead acid batteries



UPS

Features

- Excellent high rate discharge efficiency, typically 40% higher than equivalent standard product
- Low discharge rate for long shelf life
- Absorbed glass mat (AGM) technology assures no free electrolyte
- High gas recombination efficiency
- Standard case material is flame retardant to UL94:HB
- FR option flame retardant to UL94:VØ (oxygen index 30)
- Manufactured in factories that comply with ISO9001
- Complies with BS EN60896-21+22

Applications

- UPS
- All other high rate discharge applications

HIGH RATE HR — 10 to 12 year EUROBAT classification — Long Life

Model name	Nominal Voltage (Volts)	Capacity		Watts per cell 10 min to 1.6VPC at 20˚C (watts)	Dimensions (mm)			Weight - typical (kg)	Impedance at 1kHz mOhms	1 Second rate (Amps)	Terminal type	Layout (see page 18)	Torque (Nm)
		20-hr rate to 10.5V at 20˚C (Ah)	10-hr rate to 10.8V at 20˚C (Ah)		Length (±2)	Width (±2)	Overall height (±2)						
SW200*	12	6.2	5.8	33	151	51	97.5	2.5	18	100	A+C	4	-
SW280*	12	7.8	7	47	151	65	97.5	2.6	14	150	C	4	-

*SW200 & SW280 are EUROBAT General Purpose 6 to 9 years classification

SWL750(FR)	12	25	22.9	128	166	175	125	9.8	8.5	500	D	2	2.5
SWL780V(FR)	12	28.8	27	136	166	125	175	10.1	8.5	500	D	2	2.5
SWL1100(FR)	12	40.6	39.6	200	197	165	170	14.5	7.5	500	D	2	2.5
SWL1800(FR)	12	57.6	55	329	216	168	223	23	6	800	E	1	4.8
SWL1850(FR)	12	74	66	319	350	166	174	23.8	4.4	800	E	2	4.8
SWL1850-6(FR)	6	148	132	-	350	166	174	23.8	1.8	500	E	5	4.8
SWL2250(FR)	12	86	76	375	380	166	174	28	3.6	800	F	2	6
SWL2300E(FR)	12	80	78	400	261	168	225	28	5	800	E	1	4.8
SWL2500E(FR)	12	93.6	91.4	490	305	168	225	32	4	1000	E	1	4.8
SWL2500TFR	12	93.6	91.4	490	305	173	223	32	4	1000	E	1	4.8
SWL2500-6(FR)	6	184	180	922	297	168	231.5	32.5	1.7	1500	F	5	6
SWL3300(FR)	12	110.2	102.5	550	350	168	225	37.5	3.5	1100	F	1	6
SWL3800(FR)	12	135	124	701	350	173	272	48	3	1200	F	1	6
SWL4250FR	12	150	140	711	341	173	281	49	2.7	1200	F	1	11.9
SWL4300(FR)	12	140	130	716.8	350	173	272	49.2	3	1200	F	1	6

yuasa.co.uk/SWL
For more information and technical data



SWL+ series

Valve regulated lead acid batteries



UPS

Features

- Extended design life and EUROBAT classification
- Enhanced high-rate performance
- Hybrid pure Lead technology
- HT Element X Alloy technology
- Sustainable design and manufacture
- 100% quality inspection and guaranteed capacity
- Enhanced energy density
- Superior deep discharge recovery
- Valve regulated, maintenance free design
- Versatile orientation
- Flame retardant options
- Fully compatible with existing UK manufactured SWL installations

Applications

- UPS
- All other high rate discharge applications

HT ELEMENT X ALLOY

Over 12 year EUROBAT classification

Very Long Life

Model name	Nominal Voltage (Volts)	Capacity		Watts per cell 10 min to1.6VPC at 20°C (watts)	Dimensions (mm)			Weight - typical (kg)	Impedance at 1kHz mOhms	1 Second rate (Amps)	Torque (Nm)
		20-hr rate to 10.5V at20°C (Ah)	10-hr rate to 10.8V at20°C (Ah)		Length (±2)	Width (±2)	Overall height (±2)				
SWL+800(FR)	12	25	22.9	133	166	175	125	9.8	8.5	500	2.5
SWL+850(FR)	12	28.8	27	142	166	125	175	10.3	8.5	500	2.5
SWL+1200(FR)	12	40.6	39.6	200	197	165	170	14.5	7.5	500	2.5
SWL+1850-6(FR)	6	148	132	-	350	166	174	23.8	1.8	500	4.8
SWL+1950(FR)	12	74	66	325	350	166	174	23.3	4.4	800	4.8
SWL+2000(FR)	12	57.6	55	333	216	168	223	23.2	6	800	4.8
SWL+2250(FR)	12	86	76	375	380	166	177.5	28	3.6	800	6
SWL+2450(FR)	12	80	78	408	261	168	225.7	28.3	5	800	4.8
SWL+2800-6(FR)	6	184	180	933	297	168	232.5	32.5	1.7	1500	6
SWL+2900-12FT	12	92.2	90	490	395	105	255	32	3.4	540	3.9
SWL+3000(FR)	12	93.6	91.4	500	305	168	225.7	33	4	1000	4.8
SWL+3500(FR)	12	110.2	102	583	350	168	225.7	37.7	3.5	1100	6
SWL+4000(FR)	12	135	124	667	350	173	272	49.2	3	1200	6
SWL+4300(FR)	12	140	130	716.8	350	173	272	49.2	3	1200	6

yuasa.co.uk/SWL-plus
For more information and technical data



HT ELEMENT X ALLOY

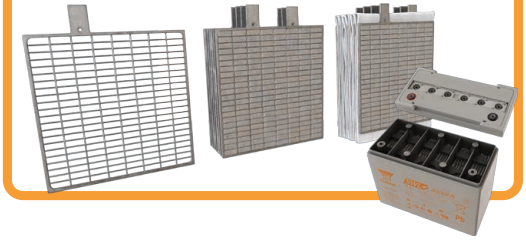
High temperatures can cause grid corrosion and growth which weakens the battery and reduces its service life.

GS Yuasa's HT Element X Alloy stops this at the source, delivering more power for longer, even in tough environments.

Low-corrosion grid alloy
Made from hybrid pure Lead to resist corrosion and reduce water loss

Reinforced grid frame
A thicker outer edge slows grid deformation and boosts durability

X impurity minimisation
Microscopic impurities in Lead - known as 'X'- are tightly controlled



EN series

Valve regulated lead acid batteries



UPS

Features

- Designed for flexibility in series & parallel string arrangements to support extensive variations in network capacity
- Low discharge rate for long shelf life
- Absorbed glass mat (AGM) technology assures no free electrolyte
- High gas recombination efficiency
- Fully compliant with BS EN60896-21+22
- Case material ABS flame retardant UL94:VØ

Applications

- UPS
- Telecoms
- Emergency lighting

Over 12 year EUROBAT classification
Very Long Life

Model name	Nominal Voltage (Volts)	Capacity		Watts per cell 10 min to 1.6VPC at 20˚C (watts)	Dimensions (mm)			Weight - typical (kg)	Impedance at 1kHz mOhms	1 Second rate (Amps)	Terminal type	Layout (see page 18)	Torque (Nm)
		20-hr rate to 10.5V at 20˚C (Ah)	10-hr rate to 10.8V at 20˚C (Ah)		Length (±2)	Width (±2)	Overall height (±2)						
EN80-6	6	86.4	81.6	336.1	200	208	238	23	2	1000	F	8	6
EN100-4	4	108	102	420.1	200	208	238	17.5	1.5	1000	F	8	6
EN100-6	6	108	102	420.1	200	208	238	23	2	1000	F	8	6
EN160-4	4	172.8	163.2	672.2	206	210	240	24	1	1500	F	10	6
EN160-6	6	172.8	163.2	672.2	305	210	240	35	1.5	1500	F	9	6
EN180-6	6	193	181.4	767.7	305	210	240	38	0.5 (single cell)	1500	F	9	6
EN320-2	2	345.6	326.4	1344.4	206	210	240	24	0.5 (single cell)	3000	F	10	6
EN480-2	2	518.4	489.6	2016.7	305	210	240	35	0.5 (single cell)	4500	F	11	6
EN540-2	2	579	544.2	2303.1	305	210	240	38	0.5 (single cell)	4500	F	11	6

yuasa.co.uk/EN
For more information and technical data



ENL series

Valve regulated lead acid batteries



UPS

Features

- 15 year design life version of the EN series
- Designed for flexibility in series & parallel string arrangements to support extensive variations in network capacity
- Low discharge rate for long shelf life
- Absorbed glass mat (AGM) technology assures no free electrolyte
- High gas recombination efficiency
- Fully compliant with BS EN60896-21+22
- Case material ABS flame retardant UL94:VØ

Applications

- UPS
- Telecoms
- Emergency lighting
- Renewable energy

Over 12 year EUROBAT classification
Very Long Life

Model name	Nominal Voltage (Volts)	Capacity		Watts per cell 10 min to 1.6VPC at 20°C (watts)	Dimensions (mm)			Weight - typical (kg)	Impedance at 1kHz mOhms	1 Second rate (Amps)	Terminal type	Layout (see page 18)	Torque (Nm)
		20-hr rate to 10.5V at 20°C (Ah)	10-hr rate to 10.8V at 20°C (Ah)		Length (±1)	Width (±1)	Overall height (±2)						
ENL100-4	4	108	102	399.1	200	208	238	17.5	1.5	1000	F	8	6
ENL100-6	6	108	102	399.1	200	208	238	23	2	1000	F	8	6
ENL160-6	6	172.8	163.2	638.6	305	210	240	35	1.5	1500	F	9	6
ENL320-2	2	345.6	326.4	1277.2	206	210	240	24	0.5 (single cell)	3000	F	10	6
ENL480-2	2	518.4	489.6	1915.8	305	210	240	35	0.5 (single cell)	4500	F	11	6
ENL100-12FT	12	108	102	N/A	558	125	235	41	7.5	500	F	3	6

yuasa.co.uk/ENL
For more information and technical data



REC series
Premium VRLA cyclic batteries



Features
- Double cycle life when compared to standard VRLA
- Durability for deep discharge
- Modern construction to considerably prolong service life
- Low discharge rate for long shelf life
- Maintenance free
- Absorbed glass mat (AGM) technology assures no free electrolyte
- High gas recombination efficiency

Applications
- Golf & mobility
- Solar & wind
- Renewable energy
- Professional tools
- Automatic guided vehicles
- Emergency lighting
- Measuring instruments

up to 600 cyclic design life

Model name	Nominal Voltage (Volts)	Capacity		Watts per cell 10 min to 1.6VPC at 20˚C (watts)	Dimensions (mm)			Weight - typical (kg)	Impedance at 1kHz mOhms	1 Second rate (Amps)	Terminal type	Layout (see page 18)	Torque (Nm)
		20-hr rate to 10.5V at 20˚C (Ah)	10-hr rate to 10.8V at 20˚C (Ah)		Length (±3)	Width (±3)	Overall height (±3)						
REC10-12	12	10	9.3	51.8	151	65	115.5	3.2	17.6	150	C	4	N/A
REC14-12	12	13	11.9	78.3	151	98	97.5	4.2	10.1	195	C	4	N/A
REC22-12B / I	12	22	19.7	120.8	181	76.2	167	6.2	8.2	330	G / D	2	2-3
REC26-12I	12	26	23.5	145	166	175	125	9	8.8	330	D	2	2-3
REC36-12I	12	36	32	166.7	196	130	169	11.2	8.7	360	D	1	2-3
REC50-12I	12	50	40	233	197	165	175	15.3	5.7	400	D	2	2-3
REC80-12I	12	80	74	404	259	168	212.5	27	4.7	480	E	1	3.9-5.4

REC & NPC carrying cases

Model	Description
GB 12210	Carrying case for REC22-12B / I
GB 12260	Carrying case for REC26-12 & NPC24-12I
GB 12360	Carrying case for REC36





yuasa.co.uk/REC
For more information and technical data



NPC series
VRLA cyclic batteries



Features
- Double cycle life when compared to standard VRLA
- Durability for deep discharge
- Modern construction to considerably prolong service life
- Low discharge rate for long shelf life
- Maintenance free
- Absorbed glass mat (AGM) technology assures no free electrolyte
- High gas recombination efficiency

Applications
- Golf & mobility
- Solar & wind
- Renewable energy
- Professional tools
- Automatic guided vehicles
- Emergency lighting
- Measuring instruments

up to 600 cyclic design life

Model name	Nominal Voltage (Volts)	Capacity		Dimensions (mm)			Weight - typical (kg)	Impedance at 1kHz mOhms	1 Second rate (Amps)	Terminal type	Layout (see page 18)
		20-hr rate to 10.5V at 20˚C (Ah)	10-hr rate to 10.8V at 20˚C (Ah)	Length (±3)	Width (±3)	Overall height (±3)					
NPC24-12I	12	24	21.1	166	175	125	9	9.5	500	D	2
NPC38-12I	12	38	33.4	197	165	170	14.2	7.5	500	D	2
NPC65-12I	12	65	57.2	350	166	174	23	5	800	E	2
NPC100-12	12	100	92.3	350	168	225	38.8	4	1100	F	1

REC & NPC PowaKaddy adaptors

Model	Description
GCREC2212B	For REC22-12B
GCREC2212I	For REC22-12I
PK456II-24	For REC26-12 & NPC24-12I
GC12360	For REC36



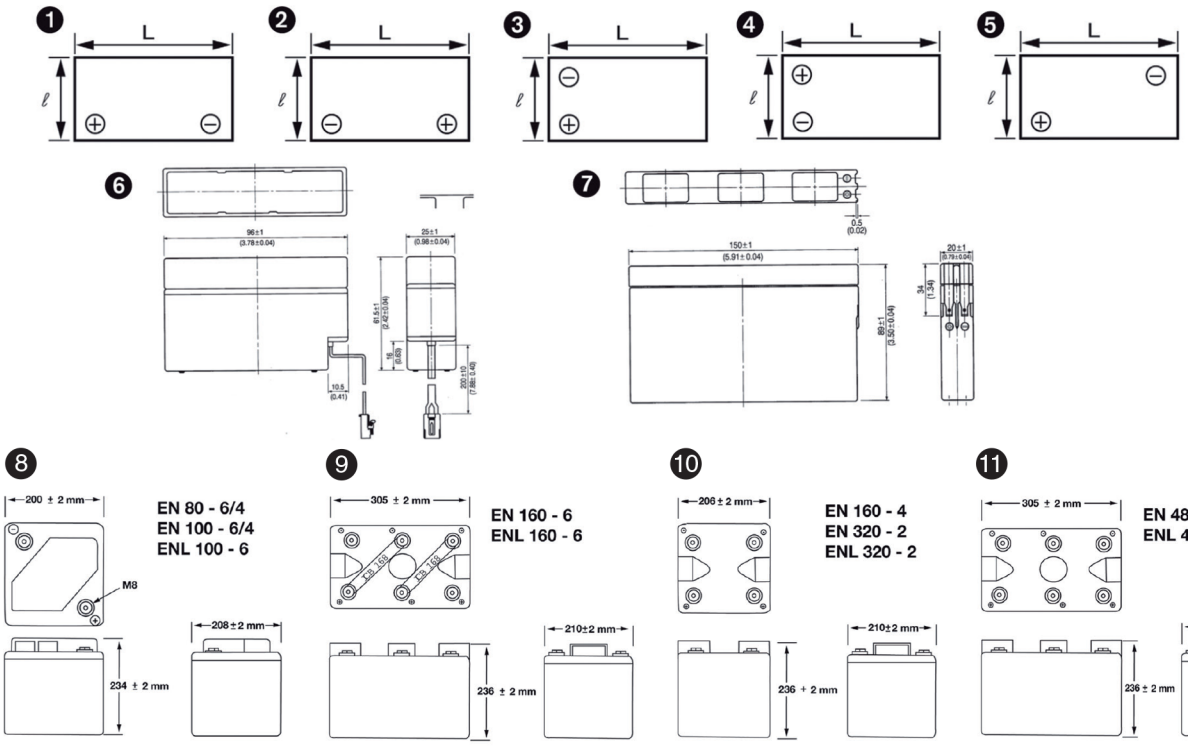


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For more information and technical data

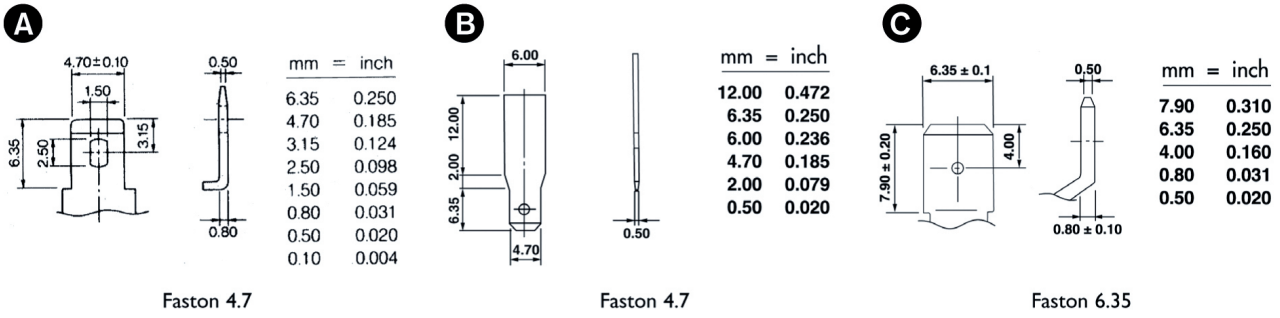


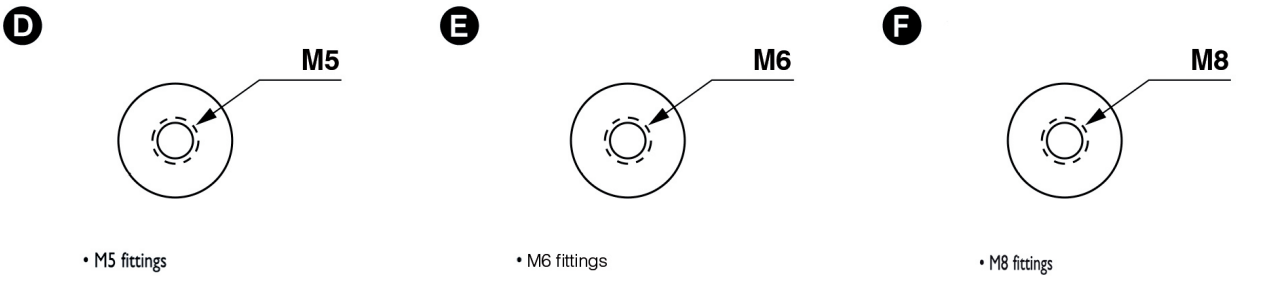
Layout & terminal diagrams

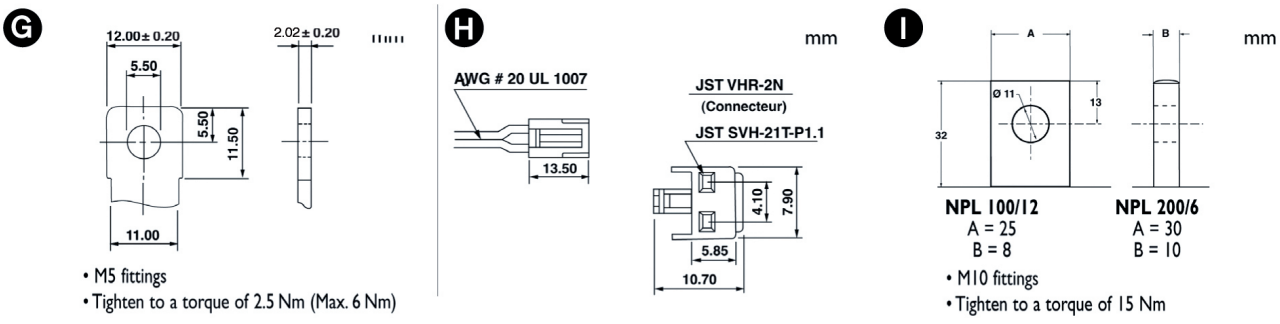
Layout



Terminals

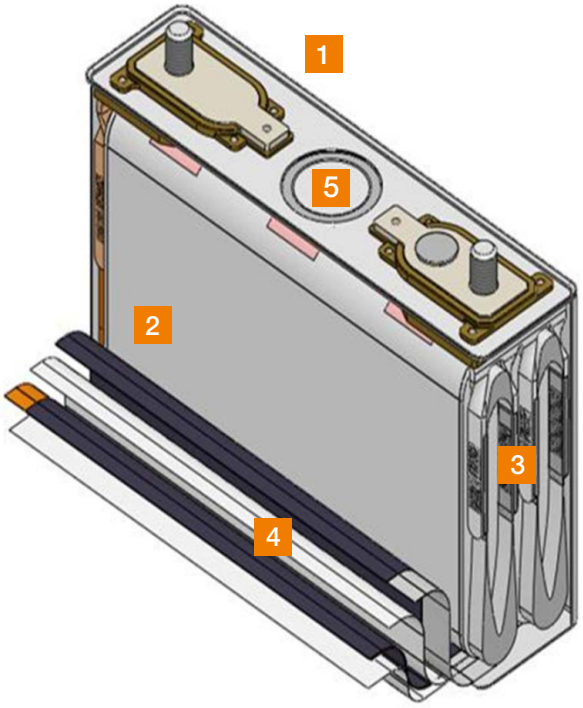






Lithium series: Engineered for unparalleled reliability

GS Yuasa lithium-ion cells are designed and manufactured in Japan using the highest quality components and processes.



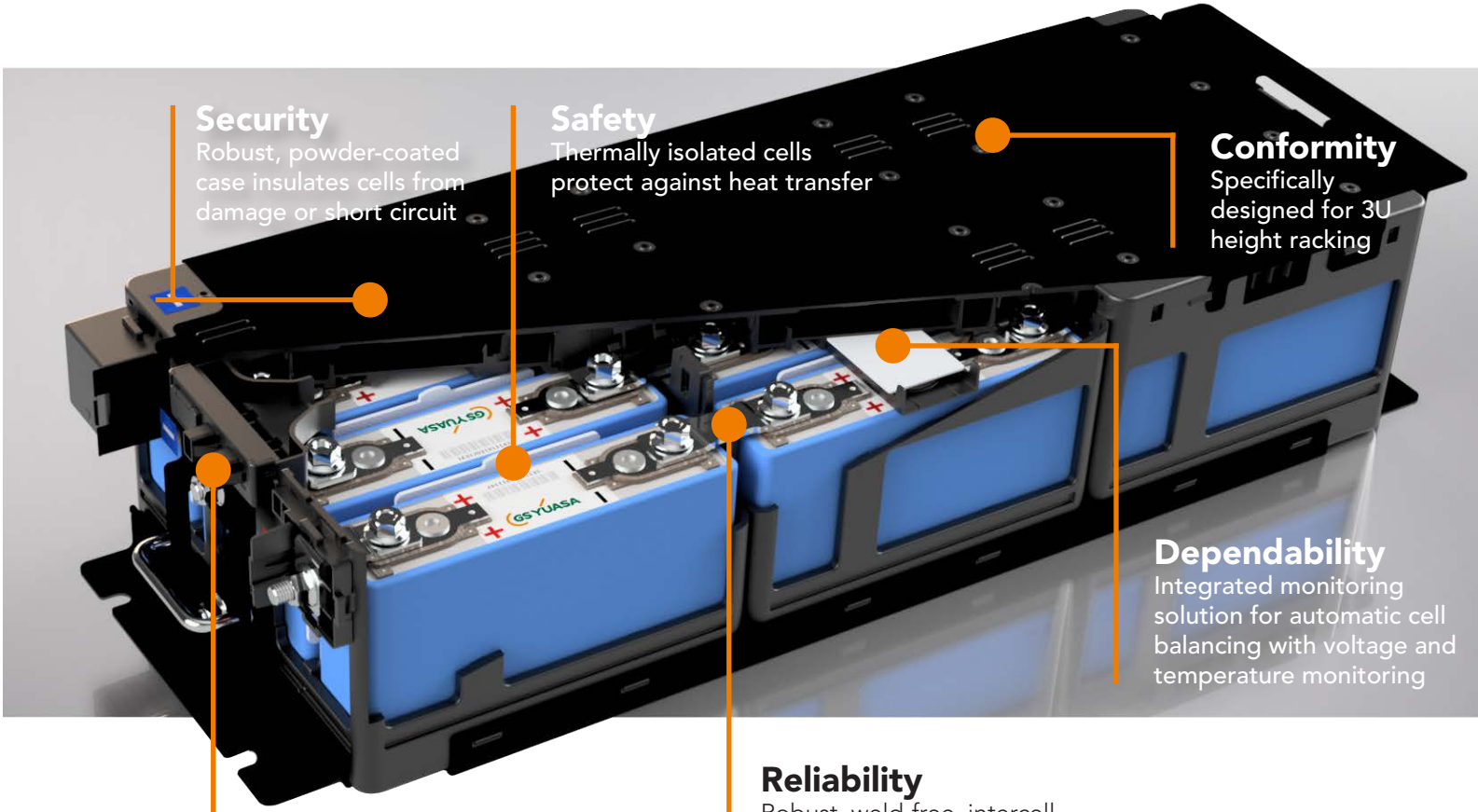
1 Robust stainless steel prismatic case protects against impact while allowing for dissipation of heat during high-rate charging or discharging.

2 Flexible wound element, constructed with minimal edges ensures protection against short circuits to provide ultimate reliability.

3 Internal positive and negative connections are sited at opposite ends of the wound element to provide uniform current distribution for extended service life at high rates.

4 Robust high performance separator to provide protection against short circuits, preventing temperature increase and the damage this can cause.

5 Integrated pressure release plate is a safety feature designed to vent in the ultra rare event of gas building up within the cell.



Lithium series
GS Yuasa LIM Li-ion batteries

LIM30HL range



Suitable for:

- High power applications
- Diesel hybrid crane
- Diesel hybrid trains
- Short-duration UPS systems
- Fuel cell hybrid transport vehciles

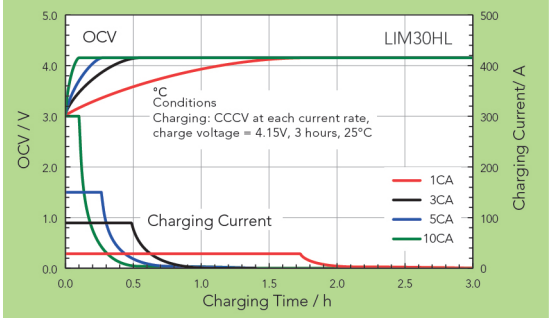
LIM30HL modules have exceptionally high power capabilities.

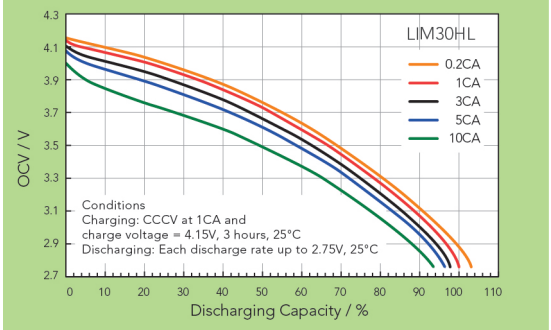
Ideal for applications in which two seconds to five minutes of discharge is required.

- Provides a cost effective alternative to flywheels or supercapacitors.
- Ideal for moving applications, such as material handling equipment, cranes and trains due to their ability to accept bursts of regenerative energy.
- Lithium manganese chemistry provides up to 50,000 cycles in partial state of charge conditions.
- Integrated battery management system to ensure cells are continuously balanced.

	LIM30HL-8*1	LIM30HL-12*1
Number of cells	8	12
Nominal capacity	31.5 Ah	
Nominal Voltage	28.8V	43.2V
Max. charging rate	600 A (24C) up to 14 seconds 314 A (12.6C) up to 180 seconds	
Max. discharging rate	600 A (24C) up to 14 seconds 271 A (10.8C) up to 300 seconds	
Ambient temperature	Charging -10 to +45°C Discharging -20 to +45°C	
Weight	17.5kg	27kg
Dimensions (L x W x H)	440 x 219 x 128 mm	617 x 219 x 128 mm

Charging Characteristics







LIM30HL-12



LIM30HL-8

Power

LIM50EL range



Suitable for:

- Renewable energy and microgrids
- Electric vehicle charging systems
- Diesel generator hybrid systems
- UPS systems
- Transportable energy storage
- Marine vessel propulsion
- Material handling and automated guided vehicles

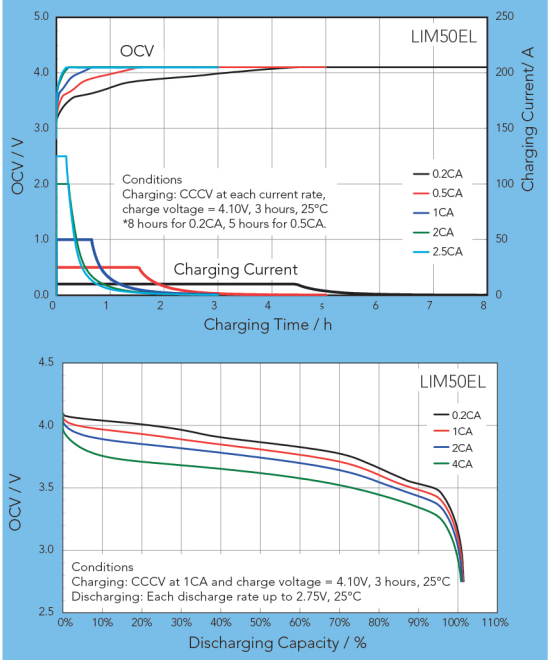
The LIM50EL is our premium energy storage module providing superior cyclic and standby life duration.

Ideal for applications in which two minutes to ten hours of discharge is required.

- Lithium manganese chemistry provides high energy density giving more power from a compact solution.
- Suitable for high voltage applications. Modules can be connected in series to meet the required system voltage.
- Can be used in parallel to create a high capacity energy storage solution.
- Charge acceptance capability extends to sub-zero temperatures.

	LIM50EL-8	LIM50EL-12
Number of cells	8	12
Nominal capacity	50 Ah	
Nominal Voltage	30.4V	45.6V
Max. charging rate	125 A (2.5C)	
Max. discharging rate	300 A (6C) up to 60 seconds 200 A (4C)	
Ambient temperature	-20 to +45°C	
Weight	18kg	27kg
Dimensions (L x W x H)	440 x 219 x 128 mm	617 x 219 x 128 mm

Charging Characteristics





LIM50EL-7



LIM50EL-8



LIM50EL-12

Fully scalable solutions for ESS applications



GS Yuasa LIM modules are a fully configurable solution which can be used to create powerful Energy Storage Systems (ESS) for all applications and environments and to meet any power requirement.

Our modules are easily scalable by design which means systems can range from a single module up to a field of large ESS containers full of thousands of modules.

Common configurations include ESS cabinet style units which can easily be integrated into commercial and industrial spaces to provide a flexible and dependable energy supply.

Cabinets can also be fully weatherproof allowing for outdoor installation in a completely flexible footprint.

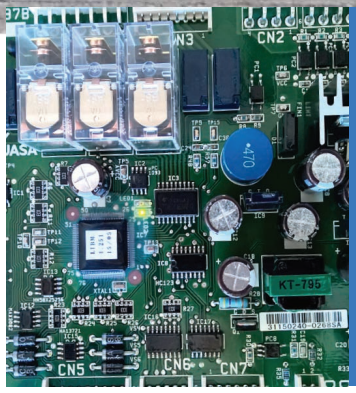


Containerised ESS systems are housed within a 20 or 40ft unit which can be designed and built for the intended application's operational requirments. They are weatherproof and can be incorporated onto any site with no need for any internal space.

ESS containers can be used in multiples and also combined with smaller cabinet style units. The optimum solution will depend on your power requirements, application, the space available and it's location.

GS Yuasa engineers will fully assist with the specification development and selection of the premium solution for your project.





Li-ion battery control modules (LiBM)

- Monitors & controls the operation of up to 26 lithium ion modules
- Multiple LiBMs can be networked for larger system integration
- Provides full access to all cell data via RS485 and CANbus 2.0b ports
- 16 cell & monitoring system functions are checked continuously
- Status thresholds are configurable for all monitored parameters
- Warning & alarm outputs configurable via relay and opto-isolated NO and NC contacts
- State of Charge measured by Voltage & current analysis
- On-board data logging capability
- Low power consumption at 24Vdc

Why GS Yuasa lithium

Long cyclic life at high power

GS Yuasa modules have been specifically designed to provide exceptional levels of cyclic performance, even during continuous high power operation. Unlike most lithium options available, they do not compromise cyclic performance to deliver high power.

When compared to other lithium-ion options, GS Yuasa batteries provide:

/ Over 11,000 cycles at 100% depth of discharge for a prolonged service life.

/ Higher power in a compact footprint so system power requirements can be met in a considerably smaller space.

Superior high charge and discharge performance

Manufacturered for class-leading performance in applications where high charge and discharge rates are required. This is particularly important for energy capture applications such as wave power and kinetic energy capture.

The right chemistry for the right application

With over 30 years experience, we offer a comprehensive range of products and various lithium-ion chemistries to provide the optimum solution for every application.

Integrated solutions

To ensure ultimate reliability and safety, we design and manufacture GS Yuasa lithium modules as a complete solution. This includes cells, modules, critical control components and advanced management software.

Stainless steel cell container

The number one cause of short circuits in lithium cells results from using nickel plated containers. GS Yuasa cells use stainless steel to eliminate this risk while providing exceptional corrosion resistance.

No requirement for off-line balancing

Thanks to their lithium manganese chemistry, GS Yuasa LIM modules can be operated continuously in partial states of charge. They do not need to be taken out of service to allow cell balancing activities to take place.

Environmentally responsible

Unlike most solutions on the market, GS Yuasa modules are constructed in a way that aids recycling.

They use lithium manganese chemistry which is widely available from responsible and recycled sources.

Lithium-ion technology is crucial to enabling a greener future through renewable power generation and storage.

NiCd & NiMH batteries

YU-Lite NiCd

YU-Lite NiCd, NiMH and Lithium batteries



Features

- Rechargeable with excellent cyclic performance
- Long service life of up to four years in emergency lighting applications
- Foamed Nickel technology & 3D mesh structure for higher capacity in smaller can sizes
- High temperature versions tested to ICEL 1010
- Maintenance free

Applications

Packs can be tailored to a wide range of smaller power applications, including:

- Emergency lighting
- Electronic equipment
- Testing equipment

YU-Lite NiCd high temp D cells - most popular configurations

Cell Qty	Voltage	Capacity (Ah)	Dimensions (LxD) mm	Part number			
				Leads	Leads & Amp Plug	Tags	Faston Tags
2	2.4	4	121x33.5	2DH4-0L4	2DH4-0LA4	2DH4-0T4	2DH4-0F4/LS
3	3.6	4	182x33.5	3DH4-0L4	3DH4-0LA4	3DH4-0T4	3DH4-0F4/LS
4	4.8	4	241x33.5	4DH4-0L4	4DH4-0LA4	4DH4-0T4	4DH4-0F4/LS
5	6	4	302x33.5	5DH4-0L4	5DH4-0LA4	5DH4-0T4	5DH4-0F4/LS
6	7.2	4	362x33.5	6DH4-0L4	6DH4-0LA4	6DH4-0T4	6DH4-0F4/LS

Style 4 (stick). Note: for packs with leads add 4mm to length.

Dimensions (LxW xH) mm	Part number				
	Leads	Leads & Amp Plug	Leads, Amp Plug & Back Plate	Tags	
66x33.5x62	2DH4-0L3	2DH4-0LA3	2DH4-0LAP3	2DH4-0T3	
98x33.5x62	3DH4-0L3	3DH4-0LA3	3DH4-0LAP3	3DH4-0T3	
131x33.5x62	4DH4-0L3	4DH4-0LA3	4DH4-0LAP3	4DH4-0T3	
163x33.5x62	5DH4-0L3	5DH4-0LA3	5DH4-0LAP3	5DH4-0T3	
195x33.5x62	6DH4-0L3	6DH4-0LA3	6DH4-0LAP3	6DH4-0T3	

Style 3 (side by side). Note: for packs with back plate add 3mm to width. For packs with leads add 4mm to height.

YU-Lite NiMH



Features

- Rechargeable with excellent cyclic performance
- Long service life of up to four years in emergency lighting applications
- High temperature versions tested to ICEL 1010
- Foamed Nickel technology & 3D mesh structure allows higher capacity in smaller can size
- Maintenance free

Applications

Packs can be tailored to a wide range of smaller power applications, including:

- Emergency lighting
- Electronic equipment
- Testing equipment

Cell Qty	Voltage	Capacity (Ah)	Dimensions (LxD) mm	Part number			
				Faston Tags & Leads	Leads & Amp Plug	Tags	Faston Tags
2	2.4	4	144x19	2QQMH4-0LFT4	2QQMH4-0LA4	2QQMH4-0T4	2QQMH4-0F4/LS
3	3.6	4	216x19	3QQMH4-0LFT4	3QQMH4-0LA4	3QQMH4-0T4	3QQMH4-0F4/LS

Style 4 (stick). Note: for packs with leads add 4mm to length.

The YU-Lite range is available in a wide range of configuration options. Both the NiCD and NiMH ranges can be completely custom to your specific specification, including can size, configuration and connector type. A full list of configuration options can be found on our website: yuasa.co.uk/YU-Lite. Yu-Lite NiCd batteries are only available in the UK.

YU-Lite Alarm System batteries

YU-Lite
NiCd, NiMH and Lithium batteries



Features

- Designed for use in Pyronix® wireless security systems
- Original equipment quality product
- Non-rechargeable Lithium & rechargeable NiMH options available
- Superior shelf life with minimal discharge
- High capacity

Applications

Designed for use in Hikvision®, Pyronix® and other leading security systems

Model	Voltage	Capacity (mAh)	Dimensions LxWxH (mm)	Chemistry
405050-P2/PYR	3	4700	48x50x9	Lithium
405050-P2/PYR/X2	3	4700	48x50x9	Lithium
CR-1/3N/KF1/PYR	3	170	12x10x10	Lithium
CR-1/3N/PYR	3	170	12x10x10	Lithium
CR34615D/PYR	3	12000	62x34x34	Lithium
6AAATMH250L7/PYR	7.2	250	43x20x19	NiMH
8AAM2-2LJ3/PYR	9.6	2200	115x50x14	NiMH

YU-Lite Lithium batteries



Features

- Professional specification for industrial & consumer applications
- Premium long-life product
- High capacity
- Primary cell (non-rechargeable)
- Popular for wireless security & fire applications
- Superior shelf life with minimal discharge

Applications

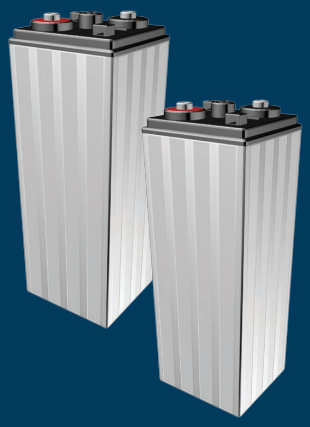
Packs can be tailored to a wide range of smaller power applications, including:

- Emergency lighting
- Electronic equipment
- Testing equipment

Model	Voltage	Capacity (mAh)	Diameter (mm)	Height (mm)
CR2-1000	3	1000	15.6	27.0
CR123A-1700	3	1700	17.0	34.5
ER14505-2400	3.6	2400	14.5	50.5
ER34615D	3.6	19000	34	62

yuasa.co.uk/YU-Lite
For more information and technical data

SLR series
Larger cyclic batteries



Features

Easy installation and smaller footprint due to modular unit design

- Horizontal orientation
- Higher gas recombination facility due to silica gel/AGM construction
- Nano-Carbon negative plate for more efficient charging & less sulphation risk
- Higher capacity retention throughout service life

Applications

- Large scale utility & commercial
- Renewable energy storage
- Load shedding
- Off grid
- UPS
- Telecoms
- Emergency lighting



up to **5500** **cyclic** design life

Model name	Nominal capacity 10-hr rate (Ah)	Nominal Voltage (Volts)	Cycle life at Depth of Discharge (DoD)	
			50%	70%
SLR500	500	2	5500	5000
SLR1000	1000	2	5500	5000

Model name	Length (mm)	Width (mm)	Total height (mm)	Weight (kg)
SLR500	156	171	492	34
SLR1000	287	165	493	67

yuasa.co.uk/SLR
For more information and technical data





Pro-Spec

Multiple purpose deep cycle batteries



Features

- Deep cycle performance
- Resistant to vibration
- Low maintenance with easy access vent caps for topping up
- Glass Mat/porous rubber separator construction to resist corrosion & reduce electrical resistance
- Special case & lid designed to prevent short circuit
- Two terminal types available

Applications

- Industrial vehicles
- Mobility vehicles
- Warehouse equipment
- Fork lifts
- Access platforms
- Floor cleaners

over **500** **cyclic** design life*

Type	Model name	Capacity				Dimensions (mm)				Weight
		@25A (Mins)	@75A (Mins)	5HR (Ah)	20HR (Ah)	Length	Width	Height	Terminal height	(kg)
Deep Cycle 6V	**DCB605-6(DT)***	383	105	175	210	259	179	245	273	27
	DCB105-6(DT)*	447	115	185	225	259	179	245	273	28.6
	DCB125-6(DT)*	488	132	195	240	259	179	245	273	30.7
	DCB145-6(DT)*	530	145	215	260	259	179	264	292	33
Deep Cycle 8V	**DCB875-8(DT)***	295	75	145	170	262	181	245	273	29
	DCB890-8(DT)*	340	90	155	190	262	181	245	273	31.6
		425	110	190	240	262	181	283	311	37.6
Deep Cycle 12V	**DCB1275-12(ET)**	290	70	125	150	329	181	245	276	37.5

*ET available on request

DT -
Dual Terminal

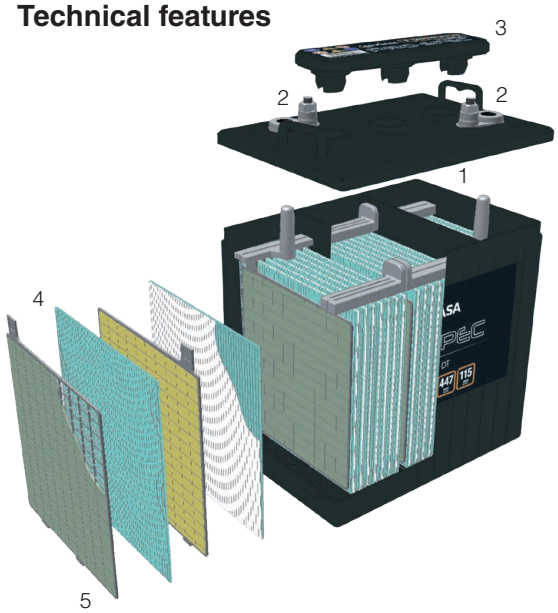


ET -
Embedded Terminal

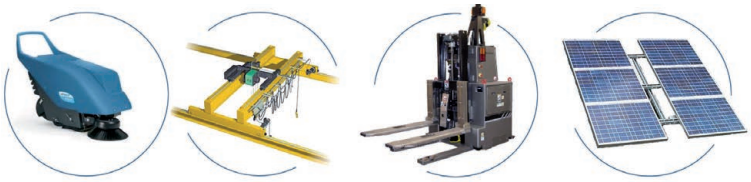


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For more information and technical data

Technical features

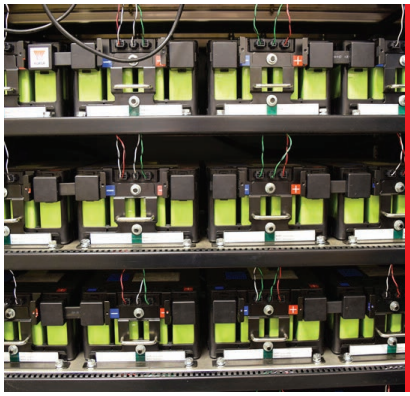


1. Case/lid:
   a. Less weight, shock resistant & acid resistant thanks to PP resin construction
   b. Specially designed structure to prevent short circuits from active material shedding in the container base
2. Terminal:
   a. Cast with special lead alloy
   b. Special plating to minimize heat generation & electrical resistance
   c. Designed to be vibration resistance
   d. Easily detachable with standard & bolt/nut structure
3. Cap:
   a. Designed & engineered to allow gas venting
   b. Easy to refill & maintain
4. Separator:
   a. Porous rubber material protects against acid corrosion
   b. Excellent physical characteristics & lower electric resistance
   c. Uses micro-fibre glass mat to minimise active material shedding
5. Plates:
   a. Negative – 99.9% pure lead with hard paste feature, specific additives for excellent deep cycle ability
   b. Positive – corrosion resistant grid with hard paste feature, specific additives for deep cycle purpose



* Suggested cyclic life based on 0.25C_5 3 hour discharge - 0.18C_5 hour charge

Racking & site services
GS Yuasa technical department



The GS Yuasa Battery Sales UK Ltd technical department provides a full battery design and quotation service, including:

- **Battery sizing**
- **Open style or cladded racks, cubical design & supply**
- **Gas & heat calculations**
- **Autonomy, ventilation, heat dissipation & charging time calculations**
- **AutoCAD drawings**
- **Battery system testing**

To discuss your project or requirements please contact us on **01793 833555** or **info@gs-yuasa.uk**



Battery sizing

Utilising Yuasa's range of VRLA batteries, the latest design software and extensive technical expertise, our engineers will find the best battery solution tailored to your requirements.

Battery containment

GS Yuasa have a full complement of battery racking solutions available. Our popular open or cladded steel flat pack racking can be built to specification. Options include colour, tier heights, leg extensions, seismic strengthening and many more.

Gas & heat

We can provide full calculations to EN IEC 62485-2 relating to heat output and ventilation requirements of any Yuasa battery system.

Drawings

Using AutoCAD software, our engineers can provide detailed rack and battery layout drawings for your project.

Install

GS Yuasa can quote for and arrange battery installation and commissioning. Our trained engineers and over 40 years of industrial battery experience will ensure your project goes smoothly.

System testing

We offer a full battery testing service for battery installations of all sizes. Measuring every battery for impedance and voltage, a detailed report with findings and recommendations will be issued once completed.



Hioki BT3554
Impedance tester

The BT3554-50 battery internal resistance tester sets the standard for assessing the deterioration and remaining life of UPS and other lead-acid batteries by giving a complete diagnosis via battery resistance testing. The specially designed L2020 Pin Type Lead further improves testing efficiency with an L-shaped tip that lets you reach deep into the battery racks to completely probe the terminals.

The Hioki BT3554 impedance tester provides complete diagnosis of VRLA batteries with a single device.

- Battery measurement can be performed while the battery is connected to its host device, without taking it offline
- Noise reduction technology improves noise resistance
- Measure and save data in as fast as 2 seconds, a 60% improvement from the legacy 3554
- Screen and audio (*2) guidance simplifies measurement
- Instantaneously diagnose battery degradation (PASS, WARNING, FAIL) by measuring internal resistance and voltage (*1)
- Measurement data is linked to site information and saved, reducing management man-hours
- New protector delivers better ergonomic hold and durability in the field.
- Compatible with Wireless Adapter Z3210 (optional)
- Most popular portable battery tester for large lead-acid and UPS batteries
- Measure and save data in 2 seconds
- Comparator function for quick pass/fail/warning decision
- AC, 1kHz testing source
- 1μΩ resolution at 3mΩ range
- ±6V to ±60V



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For more information
and technical data

GYT117
Conductance tester

- Enhanced battery conductance testing to help ensure critical systems are operational in the event of power loss
- Accurate Siemens and Voltage readings for 6 and 12V batteries ranging from 0.5Ah to 25Ah capacity
- Easy to use, with simple walk-through operation
- Minimal time to test – typical Voltage and conductance tests completed in under ten seconds
- Prioritises battery replacement and additional testing for cost effective system management
- Runs directly from the test battery's power
- Robust and compact design with integrated leads
- Utilises patented conductance technology, minimises technician risk and battery stress
- Uses IEEE standard test method with proven correlation to battery capacity.
- Fully compliant with NIST standard so no need for calibration



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For more information
and technical data

Yu-Power®
YPCBM2 wireless battery temperature logger

The complete solution for uninterruptible power supply (UPS) battery data monitoring

A monitoring strategy is essential to ensure that a UPS system will always fulfil its role. Long service life and reliable performance can be achieved by continually monitoring key parameters.

Yuasa's easy-to-use battery monitoring solution consists of the Yu-Power YPCBM2 battery temperature logger and the Yu-Power YPCBL2 battery temperature logger USB wireless receiver. When used together these products monitor temperature and Voltage, communicate wirelessly and determine if the system is operating within the recommended guidelines.

The YPCBM2 battery temperature logger requires a 12 Volt DC power supply and can be connected to individual batteries within a rack or across a string of up to 120 Volts. By installing more loggers, greater local temperature and voltage monitoring capability can be achieved. For example, with a logger installed on every battery within a system, each one's individual status can be monitored.



- Simply connect the logger to continually monitor local temperature & Voltage
- Onboard memory automatically stores readings at a ten minute resolution for the entire life of the battery system
- Ultra-low power consumption <10µA which is less than the battery's self-discharge rate
- Has a discoverable unique serial number embedded, allowing for detection of each individual logger
- Can be given a personalised device name within the Yu-Power analytical software for easy identification of each data logger
- Long wires with bare lead ends to allow easy fitment with any connector type

Yu-Power®
Intelligent chargers



Yu-Power® intelligent chargers utilise multi-stage proportional timing technology to ensure safe and efficient lead acid battery charging.

Proportional timing during the bulk charging mode ensures the best balance of maximum state of charge, without damaging the battery before switching to the float charging mode.

Once in float charge mode the charger will charge the battery and maintain it at 100% state of charge, whilst using an ECO mode to save power.

YPC09A12MC	Yu-Power 900ma 12V motorcycle charger - UK plug c/w YPCCLIPMC
YPC2A6	Yu-Power 2A 6V charger - UK/Euro plug c/w YPCCLIPMC
YPC2A12	Yu-Power 2A 12V charger - UK/Euro plug c/w YPCCLIPMC
YPC4A12	Yu-Power 4A 12V charger - UK/Euro plug c/w YPCCLIP
YPC4A24	Yu-Power 4A 24V charger - UK/Euro plug c/w YPCCLIP
YPC8A12	Yu-Power 8A 12V charger - UK/Euro plug c/w YPCCLIP
YPCCLIP	Yu-Power 24" cordset (Torberry to clips)
YPCCLIPMC	Yu-Power 24" cordset (std trailer to clips)
YPCMOB	Yu-Power 6" cordset (male mobility plug to Torberry)
YPCPK	Yu-Power 24" cordset (PowaKaddy to Torberry)
YPCRINGMC	Yu-Power 24" fused ring cordset (std trailer to rings)
YPCTESTMC	Yu-Power LED battery tester (trailer plug c/w YPCRINGMC)



yuasa.co.uk/chargers
For more information and technical data

Yu-Power®
YPCBL2 battery temperature logger USB wireless receiver

The Yu-Power YPCBL2 battery temperature logger USB wireless receiver can be used on any compatible device with a USB port.

It wirelessly receives and downloads data in real-time from up to 1,000 Yu-Power YPCBM2 wireless battery temperature loggers.

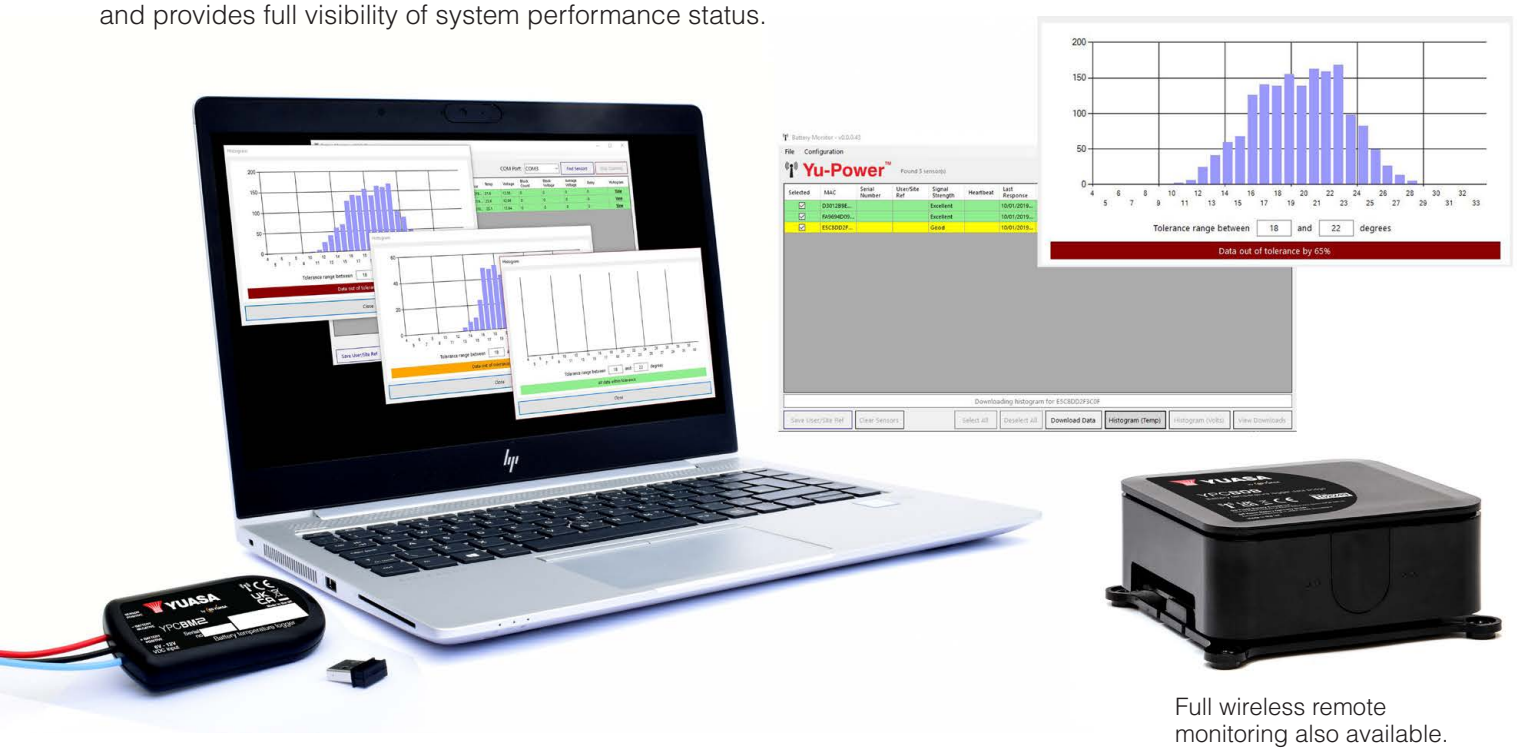


- USB connection
- Allows for one user per receiver
- Unique activation code to securely pair device

Yu-Power® analytical software

Software is supplied with the Yu-Power YPCBL2 USB wireless receiver and this powerful analytical software allows for the download and extraction of all recorded data for reporting

It is designed by Yuasa engineers to accurately display key data from each registered battery temperature logger and provides full visibility of system performance status.



Full wireless remote monitoring also available.

- Real-time accurate voltage & temperature data logging
- Customisable & easy-to-use data downloads
- No additional software required to program the data loggers
- Easy detection, set up & personalisation of up to 1,000 data loggers
- Allows export of data to Excel, CSV & text files for full end user analytic capability
- Configurable logging time frequencies
- Produces temperature & Voltage alerts & exportable graphs with pre-defined performance limits
- Future proofed web based application

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E. & O. E.

YUASA

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