

# 12ICS170

## ICS series Intensive Cycle Service

Narada's ICS series battery designed to provide high cycling and fast charge performance, idea for telecom service where power supply is unstable. With innovative structure design, high quality manufacturing and high quality material, ICS batteries are also capable of PSoC, hybrid, renewable energy storage application and other cycling/standby applications.

ICS series also have true front access terminal and front-access gas collection tubing for fast installation and facilitates maintenance.

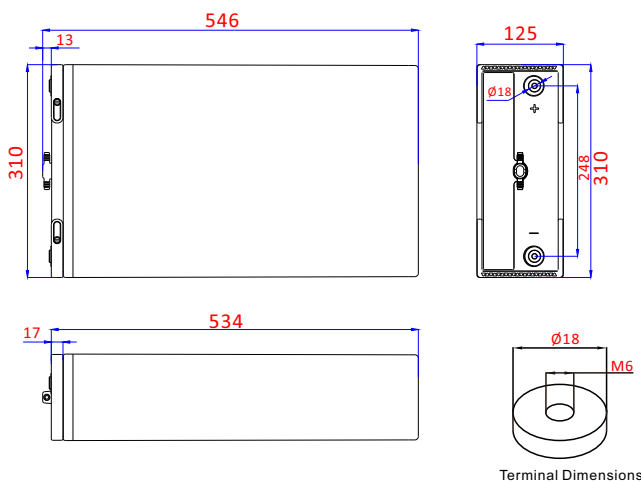


### Features & Benefits

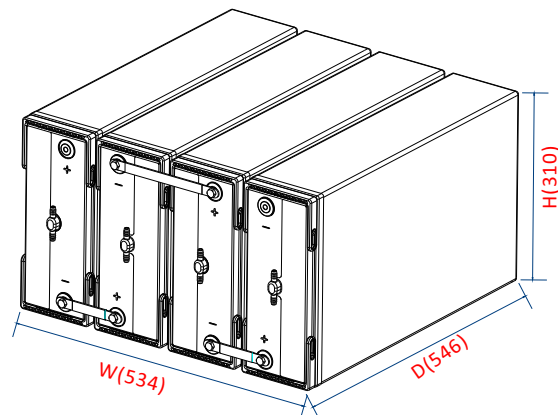
- Extra high cycling and fast charge performance
- Designed for intensive cycle service where unstable grid power supply or no-grid, such as Telecom BTS, hybrid genset, renewable energy storage application
- Suit for 19" or 23" and ETSI power racks/cabinets with front terminal
- Superb security and reliability, more cost effective than nearest equivalent
- 12 year design float life at 25°C
- Wide operating temperature range -40°C to +50°C
- True front-terminal design
  - Not requiring any additional space between the top of the battery and the next shelf
  - Easy paralleling of 48V strings (on 2 or more shelves) or 2x24V strings on one shelf via cost-effective flexible cables running along front surface
  - With rotational symmetry not requiring expensive and long cables when long strings are assembled on multiple
- Easy installation and verification of gas collection tubing via twin front-access gas nipples also with easy connection over several shelves
- Fold-away handles for easy installation and removal from shelves

### Drawings

#### 12V monobloc dimensions (in mm)



**48V system:** Total installation depth 546mm, including connector, bolt, insulation protective cover.



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### Technical specifications

#### Electrical data

Nominal voltage	12 V
Number of cells	6
Rated capacity(25°C)	170 Ah - 17A for 10h to 1.80V/cell
Float voltage	2.25Vpc at 25°C
Cycle and equalize charge voltage	2.35Vpc at 25°C
Internal resistance	5.06 mΩ ( acc. to IEC 60896-21)
Short circuit current	2455A (acc. to IEC60896-21 )
Max. charge current	unlimited, otherwise 42.5A max. if T>25°C
Self discharge	less than 3% per month at 25°C

#### Mechanical data

Weight ready for use	60.5 kg (133.4 lbs)
Length	546 mm (21.5 in)
Width	125 mm (4.92 in)
Height of monobloc	310 mm (12.2 in)
Total height	310 mm (12.2 in)
Terminal	M6 female
Terminal hardware torque	8±1.0 N.m

### Constant Current Discharge Characteristics Units: Amperes (25°C, 77°F)

End Voltage	5min	15min	45min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	12hr	20hr	24hr
1.60Vpc	390	256	135	112	67.8	49.4	39.0	32.4	27.7	21.5	17.6	15.0	9.32	7.85
1.67Vpc	358	246	133	111	67.5	49.2	38.9	32.2	27.5	21.4	17.5	14.9	9.24	7.79
1.70Vpc	350	241	131	109	66.8	48.8	38.6	32.0	27.4	21.3	17.4	14.8	9.22	7.76
1.75Vpc	313	227	128	107	65.8	48.2	38.2	31.7	27.1	21.1	17.3	14.7	9.12	7.67
1.80Vpc	292	212	121	101	63.0	46.5	37.0	30.8	26.5	20.7	17.0	14.4	9.03	7.61
1.83Vpc	249	196	117	98.5	62.0	45.8	36.5	30.4	26.0	20.3	16.7	14.2	8.83	7.43
1.85Vpc	237	188	112	95.0	60.1	44.5	35.5	29.6	25.5	19.9	16.4	13.9	8.69	7.32

### Constant Power Discharge Data Units: Watts per cell (25°C,77°F)

End Voltage	5min	15min	45min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	12hr	20hr	24hr
1.60Vpc	667	450	246	206	129	93.9	74.9	62.6	53.7	42.0	34.6	29.5	18.6	15.7
1.67Vpc	619	437	245	205	128	93.8	74.8	62.4	53.6	41.9	34.5	29.3	18.4	15.6
1.70Vpc	573	426	244	204	127	93.3	74.5	62.2	53.5	41.8	34.4	29.2	18.3	15.5
1.75Vpc	545	409	237	200	126	92.8	74.1	61.8	53.1	41.5	34.2	29.0	18.2	15.4
1.80Vpc	481	380	227	193	122	90.9	72.7	60.7	52.2	40.9	33.7	28.6	18.0	15.2
1.83Vpc	454	361	219	186	119	88.6	71.1	59.5	51.3	40.2	33.2	28.3	17.8	15.0
1.85Vpc	437	348	212	180	116	86.4	69.5	58.2	50.2	39.5	32.6	27.8	17.5	14.8