

Double Layer Capacitors use in Smart Utility Meters Designs

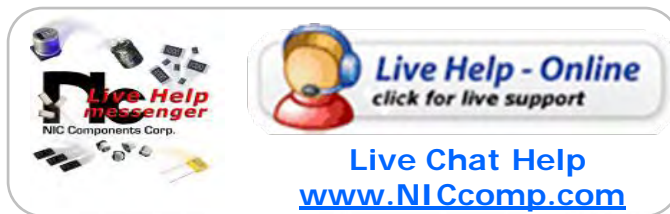
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Smart metering using communications technologies typically require back-up solution using batteries, and / or **double layer capacitors** (super capacitors)

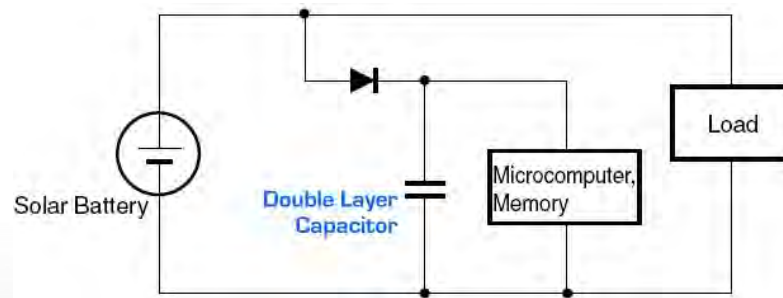
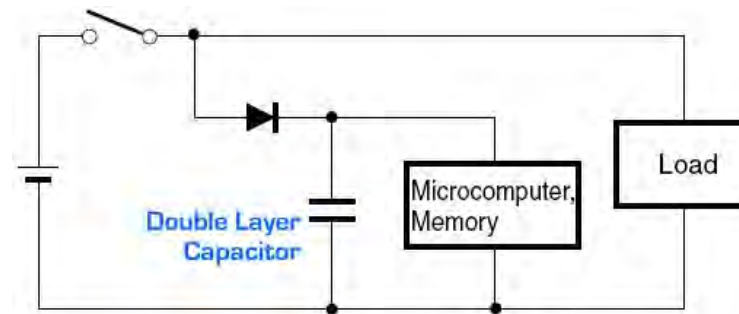
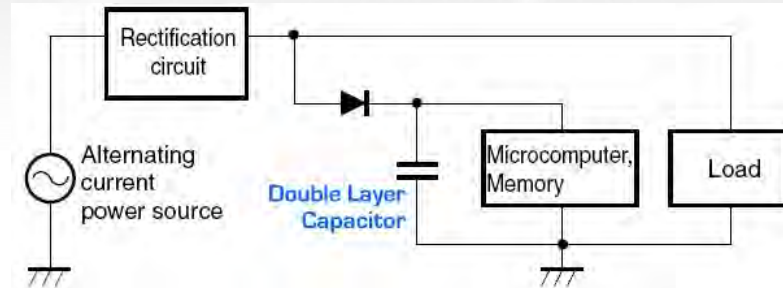


Double Layer Capacitors

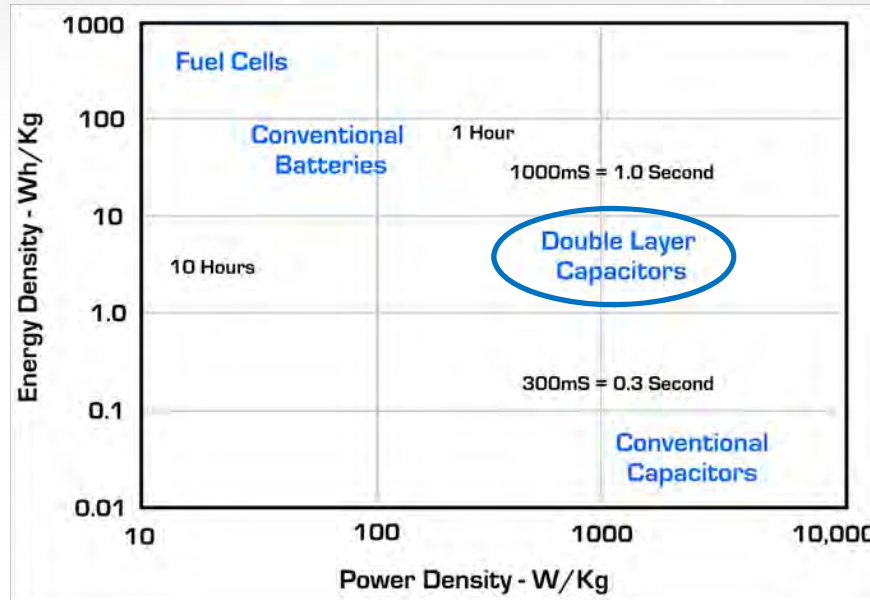
Back-up solutions using batteries and **double layer capacitors** (super capacitors) can greatly extend performance over use of batteries only

Double layer capacitors (super capacitors)

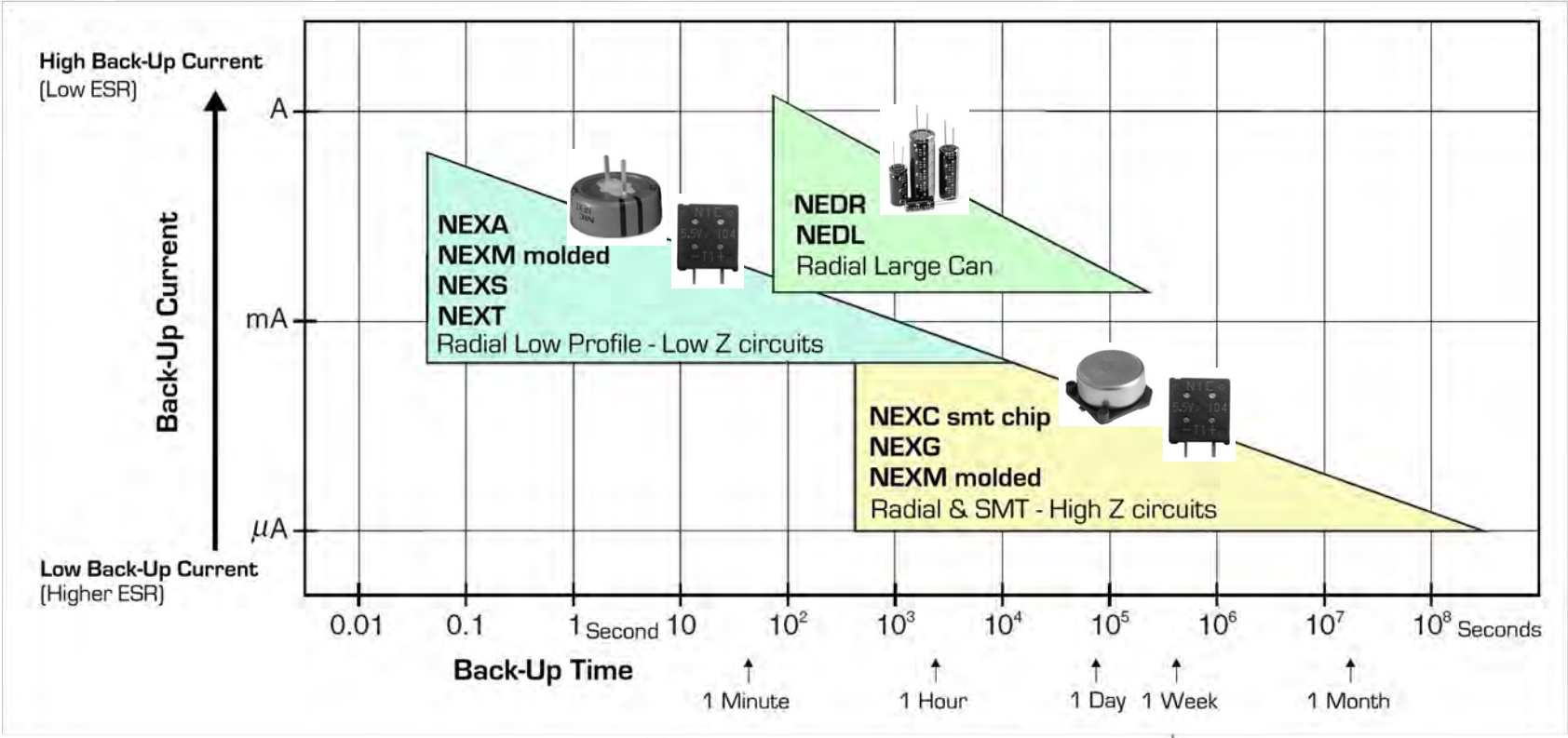
Used in **AC**, **DC**, or **Solar** powered circuits



Wh = watt-hour is unit of energy equivalent to one watt (1 W) of power expended for one hour



Feature high capacitance value (Farad) for energy storage, voltage hold-up and battery back-up applications. Double layer capacitors “EDLCs” bridge the gap (see graph above) between conventional batteries and conventional capacitors. EDLCs store and deliver temporary (or momentary) energy to electronic circuits in wide range of low voltage (2 ~ 12VDC) circuit applications.



NEXC
SMT
Reflow Soldering

NEXA / NEXG
NEXS / NEXT
Low Profile Radial LDD

NEXM
Molded Radial LDD

NEDL / NEDR
Large Case Radial LDD

Most Popular Series



NIC Series	Type	Size (mm)	Capacitance	Voltage
NEXC -25° C ~ +70° C	SMT Chip	10.5 Ø x 5.5 height 10.5 Ø x 8.5 height 10.7 Ø x 5.5 height 16 Ø x 9.5 height 21 Ø x 10.5 height	0.047F ~ 1.0F (47,000 µF ~ 1,000,000 µF)	3.5VDC 5.5VDC
NEXM -25° C ~ +70° C	Radial LDD Molded Case	5mm LS 10.5 x 11.5 x 5.0 10.5 x 11.5 x 6.5	0.01F ~ 0.22F (10,000µF ~ 220,000µF)	3.5VDC 6.5VDC
NEDL -25° C ~ +70° C NEDR -25° C ~ +60° C -25° C ~ +70° C	Radial LDD Large Can	10 Ø x 35 height 12.5 Ø x 25 height 12.5 Ø x 35 height 16 Ø x 35.5 height 18 Ø x 40 height 18 Ø x 50 height 22 Ø x 50 height 22 Ø x 65 height	10F ~ 100F	2.5VDC 2.7VDC
NEXA NEXG NEXS -25° C ~ +70° C NEXT -40° C ~ +85° C	Radial LDD Low Profile	11 Ø x 5.5 / 6.5 / 8.5 13 Ø x 8.5 / 9 14.5 Ø x 12 / 18 16 Ø x 15.5 / 25 16.5 Ø x 8.5 / 13 / 19 21.5 Ø x 13 / 15.5 / 19 28.5 Ø x 16.5 / 14 / 19 / 22 / 25.5 / 31.5 / 38 36.5 Ø x 15 / 16.5 / 27.5 44.5 Ø x 17 / 18.5 / 28.5 / 60	0.01F ~ 5.6F (10,000µF ~ 5,600,000µF)	5.5VDC 11VDC 12VDC

Most Popular Series

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