



```
-webkit-box-orient:vertical;overflow:hidden;padding-bottom:0}.b_wikiRichcard_noHeroSection .b_imagePair
.b_wikiRichcard_image{float:right;margin-top:var(--smtc-padding-ctrl-text-side)}.b_wikiRichcard_noHeroSe
ction .b_wikiRichcard
.b_clearfix.b_overflow{line-height:var(--mai-smtc-padding-card-default)}.b_wikiRichcard_noHeroSection
.b_imagePair .b_wikiRichcard_image_caption{margin-right:110px}.b_wikiRichcard_noHeroSection
.b_imagePair .sml{display:none}#b_results li.b_algoBigWiki:hover h2
a{text-decoration:underline}.b_wikiRichcard_noHeroSection .b_floatR_img{padding:0 0
var(--smtc-gap-between-content-x-small)
var(--smtc-gap-between-content-x-small)}.b_wikiRichcard_noHeroSection{margin-top:var(--smtc-gap-betwe
en-content-x-small);margin-bottom:var(--smtc-gap-between-content-xx-small);box-sizing:border-box}#b_con
tent #b_results .b_algo .b_wikiRichcard .tab-head .tab-menu
li.tab-active{box-shadow:none;background:var(--bing-smtc-background-ctrl-subtle-pressed);border-radius:var
(--mai-smtc-corner-list-card-nested-default);color:var(--bing-smtc-foreground-content-brand-rest)}#b_content
#b_results .b_algo .b_wikiRichcard:not(:has(.tab-navr)) .tab-head .tab-menu
li:hover{background:var(--smtc-background-ctrl-neutral-hover);color:var(--bing-smtc-foreground-content-bra
nd-rest);border-radius:var(--mai-smtc-corner-list-card-nested-default)}.b_wikiRichcard .tab-head .tab-menu
ul{gap:var(--smtc-gap-between-content-small)}#b_results .tab-menu li:hover{box-shadow:none}#b_content
#b_results .b_wikiRichcard .tab-active:focus-visible{outline:0}#b_results .b_wikiRichcard
.tab-menu,#b_results .b_wikiRichcard .tab-menu li,#b_results .b_wikiRichcard .tab-menu
ul{height:auto;line-height:var(--AC_LineHeight)}#b_results .b_wikiRichcard
.tab-head{display:flex;justify-content:center;align-items:center}#b_results .b_wikiRichcard
.tab-head:has(tab-navr){width:fit-content}#b_results .b_wikiRichcard .tab-head
li{padding-top:var(--smtc-gap-between-content-x-small);padding-bottom:var(--smtc-gap-between-content-x-s
mall)}#b_results .b_wikiRichcard .tab-container{padding-bottom:0}.b_wikiRichcard_noHeroSection
span{color:var(--bing-smtc-foreground-content-neutral-secondary-alt)}#b_results .b_wikiRichcard,#b_results
.b_wikiRichcard span{font:var(--bing-smtc-text-global-body3)}#b_content #b_results .b_algo
.b_wikiRichcard .tab-head .tab-menu li
.tab-active{color:var(--smtc-foreground-content-neutral-primary)}#b_content #b_results .b_algo
.b_wikiRichcard .tab-head .tab-menu li
li:not(.tab-active){color:var(--bing-smtc-foreground-content-neutral-tertiary)}#b_content #b_results .b_algo
.b_wikiRichcard:not(:has(.tab-navr)) .tab-head .tab-menu
li:not(.tab-active):hover{color:var(--bing-smtc-foreground-content-brand-rest)}.b_wikiRichcard
.b_vList>li{padding-bottom:var(--smtc-gap-between-content-xx-small)}#b_results>li .b_wikiRichcard
a{color:var(--smtc-ctrl-link-foreground-brand-rest)}.tab-container{overflow:hidden;margin:0
auto;white-space:nowrap;padding-bottom:10px}.tab-head{display:inline-block;margin-bottom:10px;width:10
0%}.tab-menu{display:inline-block;overflow:hidden;vertical-align:top;width:100%}.tab-menu.tab-hasnav{ma
rgin-left:2px;margin-right:2px;height:32px;line-height:32px}.tab-menu
ul{list-style:none;margin-left:0}.tab-menu ul.sp_1{transition:margin 320ms
cubic-bezier(.3,.55,.1,1)}.tab-menu ul.sp_2{transition:margin 400ms cubic-bezier(.3,.55,.1,1)}.tab-menu
ul.sp_3{transition:margin 460ms cubic-bezier(.3,.55,.1,1)}.tab-menu ul.sp_4{transition:margin 560ms
```

```
cubic-bezier(.3,.55,.1,1)}.tab-menu ul.sp_5 {transition:margin 680ms
cubic-bezier(.3,.55,.1,1)}.tab-menu.tab-flex ul {display:flex }ul.tab-notrans {transition:none }.tab-menu
li,.tab-navl,.tab-navr {display:inline-block;cursor:pointer;text-align:center;line-height:32px;height:32px;width:
32px}@media screen and (forced-colors:active){.tab-navr svg,.tab-navl svg {fill:WindowText}}.tab-menu
li.tab-active,.tab-navl.tab-disable,.tab-navr.tab-disable {cursor:default}@media screen and
(-ms-high-contrast){.tab-menu li.tab-active {border-bottom:1px solid WindowText;height:30px}}.tab-menu
li {padding:0 16px;margin-right:2px}.tab-fullwidth
li {margin-right:0}.tab-navl.tab-disable,.tab-navr.tab-disable {background-color:#ecec} .tab-navl.tab-disable:
hover,.tab-navr.tab-disable:hover {background-color:#ecec} .tab-navl.tab-disable .sv_ch,.tab-navr.tab-disable
.sv_ch {fill:#444;opacity:.2}.tab-navl.tab-disable .sv_ch:hover,.tab-navr.tab-disable
.sv_ch:hover {fill:#444;opacity:.2}.tab-navl: hover,.tab-navr: hover {background-color:#f5f5f5}.tab-navl
.sv_ch: hover,.tab-navr
.sv_ch: hover {fill:#111}.tab-menu
li.tab-active {line-height:32px}.tab-menu.tab-fullwidth
li.tab-active {box-shadow:none;line-height:32px;background-color:#ecec;color:#111;border:0;border-top:0}.
tab-content {white-space:normal}.tab-hide {display:none}.tab-ajaxLoad {background:url(/rp/Dq3c4WiQf6W_1
npctmuqOI5qkG0.gif) no-repeat;width:40px;height:60px;background-size:40px 40px;margin:0
auto;position:relative;top:60px;padding-bottom:30px;transform:translateY(-30px);animation:.4s linear 0s 1
normal forwards delayLoader}@keyframes
delayLoader {0% {opacity:0}99% {opacity:0}100% {opacity:1}}.tab-ajaxCompleted {transition:transform .32s
cubic-bezier(.3,.55,.1,1)}.tab-ajaxError {margin:30px 0
0;text-align:center}.tab-menu.tab-flex>ul>li {box-sizing:border-box}.tab-menu
li {overflow:hidden;text-overflow:ellipsis;vertical-align:top}.tab-menu
li:last-child {margin-right:0}.tab-head,.tab-menu>ul {height:32px}.tab-head.tab-customLight .tab-menu
li {background-color:transparent;color:#444;opacity:.8}.tab-head.tab-customDark .tab-menu
li {background-color:transparent;color:#fff;opacity:.8}.tab-head.tab-customLight .tab-menu
li: hover,.tab-head.tab-customDark .tab-menu
li: hover {box-shadow:none;border-top:0}.tab-head.tab-customLight .tab-navl,.tab-head.tab-customLight
.tab-navr,.tab-head.tab-customDark .tab-navl,.tab-head.tab-customDark
.tab-navr {background-color:transparent}.tab-head.tab-customLight .tab-menu li.tab-active {box-shadow:inset
0 -3px 0 0 #444;opacity:1}.tab-head.tab-customDark .tab-menu li.tab-active {box-shadow:inset 0 -3px 0 0
#fff;opacity:1}.tab-head.tab-customLight .tab-menu.tab-fullwidth li,.tab-head.tab-customDark
.tab-menu.tab-fullwidth li {box-shadow:none;border-top:0;font-weight:normal}.tab-head.tab-customLight
.tab-navl span,.tab-head.tab-customLight .tab-navr span,.tab-head.tab-customDark .tab-navl
span,.tab-head.tab-customDark .tab-navr
span {background-image:url(/rp/S9IIHAMBy7JxaR5m1KRvMwDswyw.png);background-size:30px
150px;background-repeat:no-repeat;width:100%;height:100%;margin:0;display:block}.tab-head.tab-customLi
ght .tab-navl span,.tab-head.tab-customLight .tab-navr span {background-position:0
-60px}.tab-head.tab-customDark .tab-navl span,.tab-head.tab-customDark .tab-navr
span {background-position:0 0}.tab-head.tab-customLight .tab-navl span,.tab-head.tab-customDark .tab-navl
span {transform:scaleX(-1)}.tab-head.tab-customLight .tab-navl.tab-disable span,.tab-head.tab-customLight
```

```
.tab-navr.tab-disable span,.tab-head.tab-customDark .tab-navl.tab-disable span,.tab-head.tab-customDark
.tab-navr.tab-disable span{background-position:0 -30px}.tab-navl,.tab-navr{color:#737373}.tab-menu
li{background-color:#eee;color:#444}.tab-fullwidth
li{background-color:#eee}.tab-navl,.tab-navr{background-color:#eee;user-select:none}.tab-menu
li:hover{box-shadow:inset 0 -3px 0 0 #ccc;background-color:#f5f5f5;color:#111;border-top:0}.tab-menu
li.tab-active{box-shadow:inset 0 -3px 0 0 #de3700;background-color:#ececce;color:#111;border-top:0}.b_ad
.tab-flex li:hover,.tab-flex li:hover{box-shadow:inset 0 -3px 0 0 #ccc;background-color:#f5f5f5;color:#111;border-top:0}.b_ad
.tab-flex li.tab-active,.tab-flex
li.tab-active{box-shadow:inset 0 -3px 0 0 #de3700;background-color:#ececce;color:#111;border-top:0}#b_content #b_results .b_algo .tab-head
.tab-menu li:not(.tab-active){color:#666}#b_content #b_results .b_algo .tab-head .tab-menu
li.tab-active,#b_content #b_results .b_algo .tab-head .tab-menu
li:hover{color:#111}@media(forced-colors:active){.b_ad .tab-flex li.tab-active,.tab-flex
li.tab-active{position:relative}.b_ad .tab-flex li.tab-active::after,.tab-flex
li.tab-active::after{content:"";background-color:#de3700;display:block;position:absolute;bottom:0;left:0;width
:100%;height:3px;forced-color-adjust:none}}.pvc_title_with_frows{padding-bottom:10px}.paratitle
.actionmenu{float:right;margin-top:-26px}.paratitle .actionmenu::after{float:none}.b_paractl,#b_results
.b_paractl{line-height:1.5em;padding-bottom:10px}#tabcontrol_8_B6C135 .tab-head { height: 40px; }
#tabcontrol_8_B6C135 .tab-menu { height: 40px; } #tabcontrol_8_B6C135_menu { height: 40px; }
#tabcontrol_8_B6C135_menu>li { background-color: #ffffff; margin-right: 0px; height: 40px;
line-height:40px; font-weight: 700; color: #767676; } #tabcontrol_8_B6C135_menu>li:hover { color: #111;
position:relative; } #tabcontrol_8_B6C135_menu .tab-active { box-shadow: inset 0 -3px 0 0 #111;
background-color: #ffffff; line-height: 40px; color: #111; } #tabcontrol_8_B6C135_menu .tab-active:hover {
color: #111; } #tabcontrol_8_B6C135_navr, #tabcontrol_8_B6C135_navl { height: 40px; width: 32px;
background-color: #ffffff; } #tabcontrol_8_B6C135_navr .sv_ch, #tabcontrol_8_B6C135_navl .sv_ch { fill:
#444; } #tabcontrol_8_B6C135_navr:hover .sv_ch, #tabcontrol_8_B6C135_navl:hover .sv_ch { fill: #111; }
#tabcontrol_8_B6C135_navr.tab-disable .sv_ch, #tabcontrol_8_B6C135_navl.tab-disable .sv_ch { fill: #444;
opacity:.2; }WikipediaGrid-tie inverter - WikipediaOverviewOperationPayment for injected
powerTypesDatashetsExternal linksGrid-tie inverters convert DC electrical power into AC power suitable for
injecting into the electric utility company grid. The grid tie inverter (GTI) must match the phase of the grid
and maintain the output voltage slightly higher than the grid voltage at any instant. A high-quality modern
grid-tie inverter has a fixed unity power factor, which means its output voltage and current are perfectly lined
up, and its phase angle is within 1° of the AC power grid. The inverter has an internal com...
```

Properly configured, a grid tie inverter enables a building to use an alternative power generation system such as solar or wind power without extensive rewiring and without batteries.

Our selection features solar panels and specialized grid-tie inverters, designed to operate without batteries. These innovative systems take DC voltage from solar panels, utilizing a special ...

# Grid-connected inverter for solar

Source: <https://gaeconsultants.co.za/Wed-07-Apr-2021-6243.html>

Website: <https://gaeconsultants.co.za>

As more solar systems are added to the grid, more inverters are being connected to the grid than ever before. Inverter-based generation can produce energy at any frequency and does not ...

As more solar systems are added to the grid, more inverters are being connected to the grid than ever before. Inverter-based generation can ...

Website: <https://gaeconsultants.co.za>

