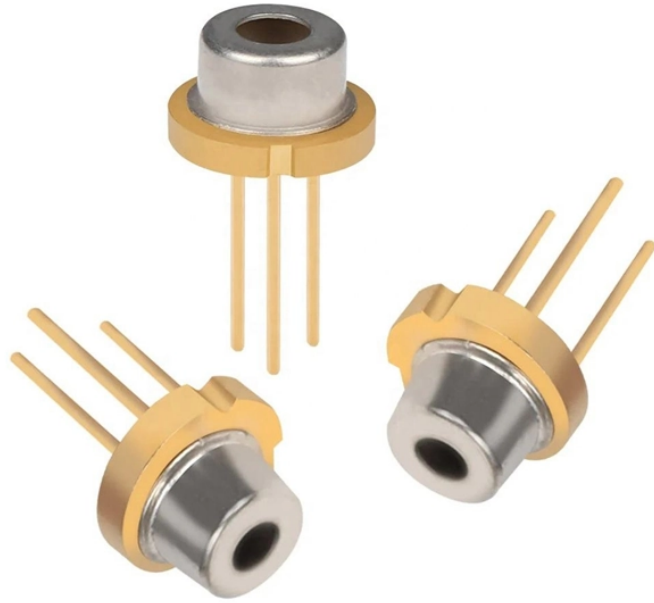


# **XF660 Spectrum Analyzer**



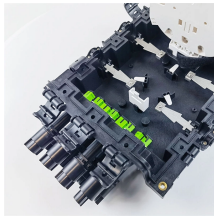
## XF660 Spectrum Analyzer



View the TI Spectrum analyzer block diagram, product recommendations, reference designs and start designing.



A DIY project for constructing a 0-100 MHz spectrum analyzer, detailing the circuit design, component selection, and calibration for ham radio use.



TestEquipmentUSA carries an impressive selection of industry-trusted spectrum analyzer kits of varying types, so you can find the right tool for your operation.



Spectrum Analyzers are available at Mouser Electronics. Mouser offers inventory, pricing, & datasheets for Spectrum Analyzers.



Looking for a spectrum analyzer? Learn the basics of what to look for when purchasing a spectrum analyzer and find the best model for your needs.



For this review we picked four different types of analyzers: Benchtop, Handheld, Modular and the Cheapest Ultra Portable Spectrum Analyzer. As a result, we present you, the reader, with a ...



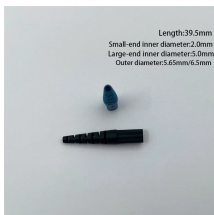
They are used to measure and analyze the frequency, amplitude, ...



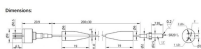
By quantifying signal behavior of frequencies, spectrum analysis creates the visibility required to unlock the potential of 5G wireless network infrastructures.



Improve your signal analysis with top-notch spectrum analyzers like ROHDE & Schwarz Oscillator and AK2515 Audio Spectrum Analyzer. Find them on eBay!



Portable, high-accuracy spectrum analyzers for real-time RF analysis—spot interference and ensure compliance anywhere.



They are used to measure and analyze the frequency, amplitude, and phase of signals, making them useful in a variety of applications, such as telecommunications, audio engineering, and ...

Types of Spectrum Analyzers Spectrum Analyzer Use Cases from Viavi Spectrum Analyzers Fundamentals and FAQ The list of applications utilizing the best spectrum analyzer technology continues to grow as the tools become more versatile and compact. In laboratory and production environments, they can be used to design, characterize, and test any product generating (or sensitive to) RF, optical, or sound waves. With wireless capability added to virtually any... See more on viavisolutions

```

#b_results li.b_ans.b_mop.b_mopb,#b_results li.b_ans.b_nonfirsttopb{border-
radius:6px;box-shadow:0 0 0 1px rgba(0,0,0,.05);margin-top:12px;margin-
bottom:10px;padding:15px 19px 10px}#b_results li.b_ans.b_mop.b_mopb
.b_sideBleed{margin-left:-19px;margin-right:-19px}#b_results .b_vidAns{border-
radius:6px;box-shadow:0 0 0 1px rgba(0,0,0,.05);padding:16px
20px;gap:10px;background:#fff}@charset "UTF-8";#b_results .b_ans.b_vidAns{box-
shadow:none!important;padding:var(--smtc-gap-between-content-medium) 0!importa
nt;background:var(--bing-smtc-background-ctrl-fade-on-image-stop-0)}#b_results
#serpvidans.vsacf .mc_vtvc,#b_results #serpvidans.vsacf .mc_vtvc_th,#b_results
#serpvidans.vsacf .cico,#b_results #serpvidans.vsacf .mc_vtvc_htb,#b_results
#serpvidans.vsacf .vrhc,#b_results #serpvidans.vsacf .vrhcp,#b_results
#serpvidans.vsacf .vrhtc,#b_results #serpvidans.vsacf .vrhtpc{border-
radius:var(--mai-smtc-corner-card-default)}#b_results #serpvidans.vsacf .mmlist
.mc_vtvc,#b_results #serpvidans.vsacf .mmlist .mc_vtvc
.mc_vtvc_meta{margin:0}#b_results #serpvidans.vsacf .mmlist .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_channel,#b_results #serpvidans.vsacf .mmlist
.mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_row_channel{color:var(--smtc-foreground-
content-neutral-primary)}#serpvidans.vsacf,#serpvidans.vsacf .expctn
.expbody,#serpvidans.vsacf .mmlist{display:flex;flex-direction:column;gap:var(--smtc-
gap-between-content-medium)}#serpvidans.vsacf
.cico{height:auto}#serpvidans.vsacf
.mc_vtvc_ban_lo{top:0;right:auto}#serpvidans.vsacf .mc_cwvc .mc_vtvc
.mc_vtvc_meta,#serpvidans.vsacf .mmlist .mc_vtvc
.mc_vtvc_meta{height:auto;padding:var(--smtc-gap-between-content-xx-small) 0
var(--smtc-gap-between-content-xx-small) var(--smtc-gap-between-content-medium);
display:flex;flex-direction:column;justify-content:space-between}#serpvidans.vsacf
.mc_cwvc .mc_vtvc .mc_vtvc_meta .mc_vtvc_title,#serpvidans.vsacf .mmlist .mc_vtvc
.mc_vtvc_meta .mc_vtvc_title{color:var(--smtc-ctrl-link-foreground-brand-rest);font:va
r(--bing-smtc-text-global-body2);height:auto;display:-webkit-box;-webkit-line-
clamp:2;-webkit-box-orient:vertical}#serpvidans.vsacf .mc_cwvc .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_block_area,#serpvidans.vsacf .mc_cwvc .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_block,#serpvidans.vsacf .mmlist .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_block_area,#serpvidans.vsacf .mmlist .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_block{display:flex;flex-
direction:column;gap:var(--smtc-padding-ctrl-text-side)}#serpvidans.vsacf .mc_cwvc
.mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_block_area
.mc_vtvc_meta_row,#serpvidans.vsacf .mc_cwvc .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block .mc_vtvc_meta_row,#serpvidans.vsacf .mmlist .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_block_area .mc_vtvc_meta_row,#serpvidans.vsacf
.mmlist .mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_block .mc_vtvc_meta_row{color:var(
--smtc-foreground-content-neutral-primary);height:var(--mai-smtc-padding-card-

```

```

default);font:var(--bing-smtc-text-global-caption1)}#serpvidans.vsacf .mc_cwvc
.mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_block_area .mc_vtvc_meta_row
.mc_vtvc_meta_row_channel::before,#serpvidans.vsacf .mc_cwvc .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_block .mc_vtvc_meta_row
.mc_vtvc_meta_row_channel::before,#serpvidans.vsacf .mmlist .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_block_area .mc_vtvc_meta_row
.mc_vtvc_meta_row_channel::before,#serpvidans.vsacf .mmlist .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_block .mc_vtvc_meta_row
.mc_vtvc_meta_row_channel::before{content:" · "}#serpvidans.vsacf .mc_cwvc
.mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_block_area
.mc_vtvc_meta_pubdate,#serpvidans.vsacf .mc_cwvc .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block .mc_vtvc_meta_pubdate,#serpvidans.vsacf .mmlist .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_block_area
.mc_vtvc_meta_pubdate,#serpvidans.vsacf .mmlist .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block .mc_vtvc_meta_pubdate{color:var(--bing-smtc-foreground-
content-neutral-tertiary);padding-bottom:0}.vsacf .mc_cwvc .mc_vtvc_con_rc,.vsacf
.mmlist .mc_vtvc_con_rc{display:flex}.vsacf .mc_cwvc .mc_vtvc_con_rc
.mc_vtvc_meta_w,.vsacf .mmlist .mc_vtvc_con_rc
.mc_vtvc_meta_w{height:auto}#serpvidans.vsacf.vsb_tr_c
.vsb_tr_t,#serpvidans.vsacf:not(.vsasa) .b_title{display:none}#serpvidans.vsacf:not(
vsasa)>.b_title:first-child,#serpvidans.vsacf:not(.vsasa) .expbody>.b_title:first-child,
#serpvidans.vsacf:not(.vsasa)>#ans_ss_dlg+.b_title,#serpvidans.vsacf:not(.vsasa)
.expbody>#ans_ss_dlg+.b_title{display:block}.vsacf .b_title{padding-left:0}.vsacf
.b_title .mmtitle{font:var(--bing-smtc-text-global-subtitle1-strong);margin-
bottom:0}.vsacf .b_title .mmtitle a::after{content:"";margin:5px 5px 0 0;border-
top:2px solid var(--smtc-foreground-content-neutral-primary);border-right:2px solid
var(--smtc-foreground-content-neutral-primary);background-size:7px 7px;width:7px;h
eight:7px;transform:rotate(45deg);display:inline-block;margin-
left:4px}#serpvidans.vsacf .b_title .mmtitle{margin-bottom:0}#serpvidans.vsacf
.b_title .mmtitle a{color:var(--smtc-foreground-content-neutral-
primary)}#serpvidans.vsacf .cardless.mmlist .mc_vtvc_con_rc,#serpvidans.vsacf
.cardless.mmlist .mc_vtvc_th{height:auto}#serpvidans.vsacf
.vsb_tr_c.va_tt{margin:0}#serpvidans.vsacf .vtbc .mv_vtvc_play,#serpvidans.vsacf
.vtbc .mv_vtvc_play_ext{position:static}#serpvidans.vsacf .va_tt
.mc_vtvc_ban_lo{display:block}#serpvidans.vsacf .mc_bc{width:auto;border-
radius:var(--smtc-ctrl-badge-sm-corner);padding:var(--smtc-padding-ctrl-text-side)
var(--smtc-gap-between-content-xx-small)}#serpvidans.vsacf .rmts .mc_bc
ems{display:none}#serpvidans.vsacf a.vsb_tr_t{color:var(--smtc-foreground-content-
neutral-primary)}.vsacf .va_tt .vsb_tr_chd
.mc_vtvc_th_dock.rmoverlay{height:36px}.vsacf .va_tt .vsb_tr_chd .mc_vtvc_th_dock
{height:92px;position:absolute;bottom:0;background:linear-
gradient(180deg,var(--bing-smtc-background-ctrl-fade-on-image-stop-0) 0%,var(--mai-
smtc-background-ctrl-on-image-rest) 100%)}#serpvidans.vsacf .va_tt a.vsb_tr_t{padding:0
0;font:var(--bing-smtc-text-global-body-2-alt-strong)}.vsacf .va_tt .vsb_tr_chd
.mc_vtvc .mc_vtvc_meta,.vsacf .va_tt .vsb_tr_chd .mc_vtvc
.mc_vtvc_title{color:var(--mai-smtc-foreground-ctrl-on-image-rest)}.vsacf span.vcmt_
ctt{font:var(--bing-smtc-text-global-caption2);margin:var(--smtc-gap-between-

```

```

content-xx-small) 0 0;height:16px}#serpvidans.vsacf .vsb_tr_chd .mc_vtvc_tot
.mc_vtvc_title strong{font-size:14px;line-
height:20px;display:unset}#serpvidans.vsacf .va_tt .b_sldrp .slide:not(:first-
child){margin-left:var(--smtc-gap-between-content-small)}#serpvidans.vsacf .va_tt
.vsb_tr_chd .mc_vtvc .mc_vtvc_title{white-space:normal;display:-webkit-box;-webkit-
line-clamp:2;-webkit-box-orient:vertical}.vsacf .b_title:not(:first-child):has(+div)
.mmtitle{font:var(--bing-smtc-text-global-body-2-alt-strong)}#serpvidans.vsacf
.revqpm+.va_tt .mm_vrc{padding-top:0}#serpvidans .va_tt .slide,#serpvidans
.mc_vtvc_th,#serpvidans .mc_vtvc_th .cico{border-radius:var(--mai-smtc-corner-card-
default)!important}#serpvidans.vsacf .b_module_expansion_control .b_btnContainer .
b_CompactExpansion{background-color:var(--bing-smtc-background-ctrl-neutral-rest)
;display:flex;justify-content:center;align-items:center;gap:4px;width:fit-
content;height:auto;padding:8px 12px}#serpvidans.vsacf
.b_module_expansion_control .b_btnContainer .b_CompactExpansion .b_CompactExpa
nsionBtnText{font:var(--bing-smtc-text-global-caption1-strong);color:var(--bing-smtc-
foreground-content-brand-rest)}#serpvidans.vsacf .b_module_expansion_control
.b_btnContainer .b_CompactExpansion
.b_arrow{display:flex;margin:0;height:auto}#serpvidans.vsacf
.b_module_expansion_control .b_btnContainer .b_CompactExpansion .b_arrow
path#Shape{fill:var(--bing-smtc-foreground-content-brand-rest)}#serpvidans.vsacf
.b_module_expansion_control .b_btnContainer::after{content:"";position:absolute;wid-
th:100%;bottom:20px;left:0;height:1px;border-radius:1px;background:var(--smtc-
stroke-ctrl-on-neutral-rest)}#b_results .b_ans.b_vidAns{box-
shadow:none;padding:12px 20px 0}#b_results .b_ans.b_vidAns
.vasac{padding:unset;margin:0}#b_results .b_ans.b_vidAns .vsa
.b_attribution{padding-bottom:0}#b_results .b_ans.b_vidAns .cardless
.salink{margin:0}#b_results .b_ans.b_vidAns .mmlist .mc_vtvc{margin-
top:10px}#b_results .b_ans.b_vidAns .mmlist .mc_vtvc .mc_vtvc_meta{display:flex;fl-
ex-direction:column;justify-content:space-between;margin:0 10px 4px
12px}#b_results .b_ans.b_vidAns .mmlist .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_channel{color:#111}#b_results .b_ans.b_vidAns .mmlist .mc_vtvc
.mc_vtvc_meta .mc_vtvc_meta_row_channel,#b_results .b_ans.b_vidAns .mmlist
.mc_vtvc .mc_vtvc_meta .mc_vtvc_meta_block_area{color:#666}#b_results
.b_ans.b_vidAns .mmlist .mc_vtvc .mc_vtvc_meta
.mc_vtvc_meta_block_area{bottom:0;height:unset}.b_dark .vsa.cardless
.mc_vtvc{background-
color:unset}.b_CompactExpandText{display:inline}#serpvidans
.b_module_expansion_control{padding-bottom:0}#serpvidans
.b_module_expansion_control .b_CompactExpansion{height:40px;line-height:40px;bo-
ttom:-6px;padding-left:20px;padding-right:20px;border-radius:20px;z-
index:6}#serpvidans .b_module_expansion_control
.b_CompactExpansionBtnText{line-height:40px}#serpvidans .btitle
.b_topTitle,#serpvidans .mc_vtvc .mc_vtvc_title{margin-bottom:0}#serpvidans .mc_v
tvc_meta_pubdate{padding-bottom:0}#serpvidans{position:relative;--va-expbody-
padding:0 0 24px;--va-ptop:0px;--va-pbop:0px}#serpvidans .expbody{overflow-x:visi-
ble!important;overflow-y:clip!important;box-sizing:border-box;padding:var(--va-
expbody-padding)}#serpvidans.ssize .expbody{max-height:calc(375px - var(--va-

```

```

ptop) - var(--va-pbop))}#serpvidans.msize .expbody{max-height:calc(535px -
var(--va-ptop) - var(--va-pbop))}#serpvidans.lsize .expbody{min-
height:536px}#serpvidans .b_removeShadow .expbody{max-
height:unset}#serpvidans .b_removeShadow .expbody .grad,#serpvidans
.b_removeShadow .expbody .expext{display:none}#b_results .b_ans.b_vidAns{--va-p
top:16px;--va-pbop:0px;--va-pleft:20px;--va-pright:20px;border-radius:6px;box-
shadow:0 0 0 1px rgba(0,0,0,.05);padding:var(--va-ptop) var(--va-pright) var(--va-
pbop) var(--va-pleft);margin-bottom:30px;gap:10px}#b_results .b_ans.b_vidAns
.b_moreLink{padding:9px 0 0 0}.mmtitle>a{display:block}.mc_fh{height:100%;bord
er-radius:6px}.mc_tc_bs{overflow:hidden}.mmlist .mc_vtvc .mc_vtvc_meta {
padding: 12px 16px 16px 16px; } .mmlist .mc_vtvc .mc_vtvc_meta_w { height:
112px; margin-top: -0px; } .mmlist .mc_vtvc .mc_vtvc_title { height: 44px; line-
height: 22px; margin-bottom: 0px; margin-top: 0px; } .mmlist .mc_vtvc
.mc_vtvc_meta_block_area { height: 40px; } .mmlist .mc_vtvc .vtmu, .mmlist
.mc_vtvc .vtpl { bottom: 120px; } .mmlist .mc_vtvc_th_dock { height: 112px; }
.mmlist .mc_vtvc_th .cico { height: 131px; } .mc_vtvc{background-color:var(--smtc-b
ackground-card-on-primary-default-rest);line-height:0;margin:0;position:relative;bord
er-radius:6px;overflow:hidden}.mc_vtvc.noshadow{box-shadow:none}.mc_vtvc_con_
rc{border-radius:6px;overflow:hidden;position:relative}.mc_vtvc>a{color:#71777d;di
splay:block;text-decoration:none;width:100%}.mc_vtvc>a:focus-
visible::after{outline:2px solid var(--smtc-ctrl-focus-outer-stroke);width:100%;height:
100%;content:"";outline-offset:-2px;position:absolute;top:0;left:0}.mc_vtvc_th{backgr
ound-color:#d5d5d5;position:relative}.mc_vtvc_th .cico{border-radius:0}.mc_vtvc_ba
n_lo,.mc_vtvc_ban_up{position:absolute;vertical-align:middle}.mc_vtvc_ban_lo{botto
m:0}.mc_vtvc_ban_up{top:0}.mc_vtvc_title{font-weight:normal;margin-bottom:11px;
overflow:hidden;color:#111;height:calc(3*18px);line-height:18px}.mc_vtvc_title
a{display:inline-block;color:#111}.mc_vtvc_title a:hover{text-decoration:underline}.
mc_vtvc_src_ico{float:left;margin-right:4px}.mc_vtvc_act{height:16px;margin-
top:-40px;padding:12px 8px;z-index:1}.mc_vtvc_actc{right:16px;bottom:16px;positio
n:absolute;display:inline-block;z-index:1}.mc_vtvc_act_sep{border-top:1px solid
#d5d5d5;height:40px;margin:0 8px}.mc_vtvc_fh .mc_vtvc_act_sep,.mc_vtvc_fh
.mc_vtvc_act{visibility:hidden}#serpvidans .b_topTitle{margin-bottom:8px}.mc_vtvc
_htc{width:100%;height:100%;position:absolute;top:0;bottom:0;left:0;right:0}.mc_vt
vc_htb{width:100%;height:100%;background:rgba(0,0,0,.7);position:absolute;top:0;b
ottom:0;left:0;right:0}.mc_vtvc_ht{width:100%;padding:0 16px;line-height:16px;colo
r:#fff;text-decoration:underline;word-break:break-word;box-sizing:border-box;vertical
-align:middle;text-align:center}.mc-vtvc_th_live_b{background-
color:#c80000;color:#fff;display:inline-block;padding:2px 8px;font:11px/14px Arial;b
order-radius:2px;text-transform:uppercase;height:15px;width:26px;position:absolute;
left:8px;top:110px}.isvctrl .isv .mc_vtvc_ban_up{left:0;right:initial}.mc_vtvc_ban_lo,.
mc_vtvc_ban_up{right:0}.vt_text.b_lRight .b_lLeft{margin:0 0 0 1px;height:14px;line-
height:14px;padding:2px 8px;background:rgba(0,0,0,.75);border-radius:2px;font-weig
ht:bold}.mc_vthtb{width:100%;height:100%;background:rgba(0,0,0,.7);position:absol
ute;top:0;bottom:0;left:0;right:0;display:table}.mc_vtht{width:100%;padding:0 16px;l
ine-height:16px;color:#fff;text-decoration:underline;word-break:break-word;box-sizin
g:border-box;vertical-align:middle;text-align:center;display:table-
cell}.vt_text.b_lRight .b_lLeft{margin:0 0 0 1px;height:14px;line-

```

```

height:14px;padding:2px 8px;background:rgba(0,0,0,.75);border-radius:2px;font-weight:bold}.emptyStyleForDebuggingPurpose{top:0}.emptyStyleForDebuggingPurpose{top:0}.mc_vtvc_center_play{width:32px;height:32px;background-size:contain;position:absolute;margin:auto;bottom:0;top:0;left:0;right:0;box-shadow:none;border-radius:0}.mc_vtvc_center_play.rmvbg{width:32px;height:32px;background-image:none}.mc_vtvc_htb,.mc_vtvc_ht{display:none}.vt_onhv .mc_vtvc_htb{display:table}.vt_onhv .mc_vtvc_ht{display:table-cell}.mc_vtvc_center_play{display:inline-block}.vt_onhv .mc_vtvc_center_play{display:none}.mc_vtvc .vtmu,.mc_vtvc .vtpl{bottom:163px}.vsarf .mc_vtvc .vtmu,.vsarf .mc_vtvc .vtpl{bottom:122px}.svarh #mmcar .mc_vtvc .vtmu,.svarh #mmcar .mc_vtvc .vtpl{bottom:137px}.svarht #mmcar .mc_vtvc .vtmu,.svarht #mmcar .mc_vtvc .vtpl{top:8px;left:8px}.mc_vtvc_center_play{background-image:url(data:image/svg+xml,%3Csvg%20width%3D%2232%22%20height%3D%2232%22%20viewBox%3D%220%200%2032%2032%22%20fill%3D%22none%22%20xmlns%3D%22http%3A%2F%2F%2F2000%2Fsvg%22%3E%0D%0A%20%20%20%20%3Crect%20width%3D%2232%22%20height%3D%2232%22%20rx%3D%2216%22%20fill%3D%22black%22%20fill-opacity%3D%220.6%22%2F%3E%0D%0A%20%20%20%20%3Cpath%20d%3D%22M14.2354%2010.1923C13.2355%209.62986%2012%2010.3524%2012%2011.4997V20.5C12%2021.6472%2013.2355%2022.3698%2014.2354%2021.8073L22.2356%2017.3073C23.2551%2016.7339%2023.2551%2015.2661%2022.2357%2014.6926L14.2354%2010.1923Z%22%20fill%3D%22white%22%20fill-opacity%3D%220.9%22%2F%3E%0D%0A%3C%2Fsvg%3E)}.mmlist .mc_vtvc{margin:10px 1px 0}.mmlist .mc_vtvc_con_rc{display:flex}.cardless .mmlist .mc_vtvc_con_rc{height:112px}.mmlist .mc_vtvc .mc_vtvc_meta{display:flex;flex-direction:column;justify-content:space-between;margin:0 10px 4px 12px;padding:0}.mmlist .mc_vtvc_title{font-weight:400;font-size:16px;height:44px;line-height:22px;margin-bottom:0;margin-top:0;color:unset}.mmlist .mc_vtvc_meta_row{font-size:13px}.mmlist .mc_vtvc .mc_vtvc_meta_block_area{height:unset}.mmlist .mc_vtvc .vtmu,.mmlist .mc_vtvc .vtpl{bottom:8px}.cardless .mmlist .mc_vtvc{box-shadow:none}.cardless.mmlist .mc_vtvc_center_play{width:32px;height:32px}.cardless.mmlist .mc_vtvc_title{font-size:16px;color:unset}.cardless.mmlist .mc_vtvc_meta_row{line-height:20px}.cardless.mmlist .mc_vtvc_meta_pubdate{padding-bottom:2px;color:#666}.cardless.mmlist .mc_vtvc_th,.cardless.mmlist .mc_vtvc_th.cico,.cardless.mmlist .mc_vtvc_th div.rms_img{border-radius:6px}.cardless.mmlist .mc_vtvc_th{height:111px}.cardless.mmlist .mc_vtvc_htc{border-radius:6px;overflow:hidden}#serpvidans.vasac.cardless{box-shadow:none}.cardless.mmlist .mc_bc{padding:2px 8px;line-height:14px;border-radius:2px;font-weight:normal}.mmlist .mc_vtvc: hover .mc_vtvc_title{text-decoration:underline}.mc_vtvc_meta{box-sizing:border-box;display:inline-block;line-height:18px;position:relative;width:100%}.mc_vtvc_meta_block{bottom:0;position:absolute;width:100%}.mc_vtvc_c_meta_row{line-height:16px;font-size:11px;height:17px;overflow:hidden;text-overflow:ellipsis;white-space:nowrap}.mc_vtvc_meta_row a{display:inline-block}.mc_vtvc_meta_row a: hover{text-decoration:underline}.mc_vtvc_meta_block_area{position:relative}.mc_vtvc_meta_block,.mc_vtvc_meta_block a{color:#444}.b_dark .mc_vtvc_meta_block{color:#edebe9}.mc_vtvc_meta_row>:nt

```



```

.mmgrid>div,.vsarr1stbig .mmgrid>div{margin-right:8px;margin-
bottom:8px}#serpvidansrr .mc_vtvc .mc_vtvc_meta{height:auto}#serpvidansrr
.mc_vtvc .mc_vtvc_title{display:-webkit-box;-webkit-line-clamp:2;-webkit-box-
orient:vertical}.mmgrid .mc_tc{border:0}.vsa .mmgrid>div:nth-child(3n){margin-
right:0}.vsa .b_moreLink{padding-top:4px}#serpvidansrr .mc_vtvc_meta_row{line-
height:18px;font-size:100%;height:17px}.vsarr .mmgrid>div:nth-child(2n){margin-
right:0}#serpvidansrr .mc_vtvc .vtmu,#serpvidansrr .mc_vtvc
.vtpl{bottom:128px}.vsarr1stbig .mmgrid>div:nth-child(2){margin-
right:0}#serpvidansrr.uipolish .mc_vtvc_meta_pubdate,#serpvidansrr.uipolish
.mc_vtvc_meta_channel,#serpvidansrr.uipolish #vidans2 .b_videocard
.video_metadata .video_source{color:#767676}#serpvidansrr #vidans2 .b_videocard
.video_metadata_container,#serpvidansrr #vidans2 .b_videocard
.video_metadata_container .video_metadata>h3{width:100%}@media(max-
width:1362.9px){#serpvidansrr
.mmgrid>div{width:168px;height:206px}#serpvidansrr .mmgrid>div
.cico,#serpvidansrr .mmgrid>div .cico
.rms_img{width:168px;height:100px}#serpvidansrr .mc_vtvc
.mc_vtvc_meta{padding:12px}#serpvidansrr .mc_vtvc
.mc_vtvc_title{height:32px;line-height:16px;margin-bottom:16px}#serpvidansrr
.mc_vtvc .mc_vtvc_meta_block_area{height:34px}#serpvidansrr
.mc_vtvc_meta_row{line-height:15px;font-size:13px;height:15px}#serpvidansrr
.mc_vtvc_meta_pubdate{padding-bottom:4px}#serpvidansrr .mc_vtvc
.vtmu,#serpvidansrr .mc_vtvc .vtpl{bottom:114px}#serpvidansrr #vidans2
.b_videocard .videoPlayer,#serpvidansrr #vidans2 .b_videocard .videoPlayer
.cico,#serpvidansrr #vidans2 .b_videocard .videoPlayer .cico .rms_img{width:343px!i
mportant;height:194px!important;margin-right:0}#@media(max-
width:1274.9px){#serpvidansrr
.mmgrid>div{width:124px;height:164px}#serpvidansrr .mmgrid>div
.cico,#serpvidansrr .mmgrid>div .cico
.rms_img{width:124px;height:76px}#serpvidansrr .mc_vtvc
.mc_vtvc_meta{padding:8px}#serpvidansrr .mc_vtvc .mc_vtvc_title{height:32px;line-
height:16px;margin-bottom:12px}#serpvidansrr .mc_vtvc
.mc_vtvc_meta_block_area{height:28px}#serpvidansrr .mc_vtvc_meta_row{line-
height:13px;font-size:11px;height:13px}#serpvidansrr
.mc_vtvc_meta_pubdate{padding-bottom:2px}#serpvidansrr .mc_vtvc
.vtmu,#serpvidansrr .mc_vtvc .vtpl{bottom:96px}#serpvidansrr #vidans2
.b_videocard .videoPlayer,#serpvidansrr #vidans2 .b_videocard .videoPlayer
.cico,#serpvidansrr #vidans2 .b_videocard .videoPlayer .cico .rms_img{width:256px!i
mportant;height:144px!important;margin-right:0}#serpvidansrr .maskthumb
.mc_bc_w{padding:8px 4px 4px 8px}#serpvidansrr.withsplitline .mmgrid>div:nth-
last-child(1),#serpvidansrr.withsplitline .mmgrid>div:nth-last-child(2){margin-
bottom:24px}#serpvidansrr.withsplitline .mmgrid{border-bottom:1px solid
#ecec;#margin-bottom:16px}#serpvidansrr #vidans2 .b_videocard
.video_metadata{max-width:auto;padding:12px 16px}#serpvidansrr #vidans2
.b_videocard{margin-bottom:12px;box-shadow:0 0 1px rgba(0,0,0,.05),0 2px 3px
rgba(0,0,0,.1);border-radius:6px}#serpvidansrr .b_rich{padding-top:0}#serpvidansrr
#vidans2 .videoPlayer{border-radius:6px 6px 0 0;overflow:hidden}#serpvidansrr

```

```

#vidans2 .b_videocard .video_metadata>h3{white-space:nowrap;overflow:hidden;text-overflow:ellipsis;-webkit-line-clamp:1;line-height:15px;height:15px;font-size:13px;color:#000;margin-bottom:20px;font-family:var(--bing-smtc-text-style-default-regular-font-family);font-style:normal;display:block}#serpvidansrr.vsarr1stbig #vidans2
.b_videocard .video_metadata .actionmenu{display:none}#serpvidansrr #vidans2
.b_videocard .video_summary,#serpvidansrr #vidans2 .b_videocard
.video_source{line-height:15px}#serpvidansrr #vidans2 .b_videocard .videoPlayer
.vtbc{right:0}.vrhc line.nhvpv .pffvi,.vrhc line.nhvpv[data-tps="S"] .pffvt,.vrhc
line.nhvpv[data-tps="M"] .pffvt,.vrhc line.nhvpv[data-tps="L"] .pffvt{display:inline-
flex}.vrhc line.nhvpv .vrhrc.pffv .vrhol{display:none}.vrhc line.nhvpv .vrhrc.pffv .play
er_ol{background:var(--mai-smtc-background-ctrl-on-image-
hover);transition:background-color .5s;display:flex;align-items:center;justify-content:c
enter;padding:var(--smtc-gap-between-content-x-small);gap:var(--smtc-gap-between-
content-x-small);box-sizing:border-box}.mc_vtvc_th img{transition:all var(--smtc-
duration-medium-01) var(--bing-smtc-animation-ease-default)}.nhvpv+.mc_vtvc_th i
mg{transform:scale(1.1)}.smtplayerhtml5{height:100%;width:100%;overflow:hidden
}.smtplayerhtml5 video{min-height:100%;min-width:100%}.smtplayerhtml5 .videopl
aying{background-color:#000}.smtplayerhtml5.hide{display:none}.pffvt{display:no
ne;color:var(--mai-smtc-foreground-ctrl-on-image-rest);font:var(--bing-smtc-text-
global-subtitle2-strong)}.pffvi{mask:url(/rp/ui07wU6K7FR_inzG7DRbP1i8fGo.svg)
center no-repeat;mask-size:12px;background:var(--bing-smtc-background-card-on-im
age-default);width:20px;height:20px;flex-shrink:0;align-self:flex-start}[data-tps="L"]
.pffvt{font:var(--bing-smtc-text-global-subtitle2-strong)}[data-tps="L"]
.pffvi{width:22px;height:22px;mask-size:16px}[data-tps="S"] .pffvt{font-
size:0}[data-tps="S"] .pffvi{width:24px;height:24px;mask-size:24px;align-
self:center}.hvpv.h5s .pffvt{display:inline-flex}.hvpv.h5s .vrhrc.pffv
.vrhol{display:none}.hvpv.h5s .vrhrc.pffv .player_ol{background:var(--mai-smtc-
background-ctrl-on-image-hover);transition:background-color .5s;display:flex;align-ite
ms:center;justify-content:center;padding:var(--smtc-gap-between-content-x-small);ga
p:var(--smtc-gap-between-content-x-small);box-sizing:border-box}.pffvt{text-
decoration:underline}.vrhcp .vrhol{position:absolute;width:100%;height:35px;max-h
eight:35px;bottom:0;left:0;padding:0;background:none;display:block;z-
index:9}.vrhcp .vrhol.hide,.vrhcp .vrhol .hide{display:none}.vrhot{white-space:nowra
p;text-overflow:ellipsis;overflow:hidden;display:inline-block;position:absolute;max-wid
th:240px;height:18px;line-height:14px;margin-left:8px;top:10px;left:0;right:0;border-
radius:2px;padding-right:8px}.vrhot div{display:inline-block}.vrhot nt{color:#fff;font-
size:11px;font-weight:bold;background-color:rgba(0,0,0,.75);padding:2px 8px;margin-
left:0;top:0;box-sizing:border-box;position:relative}.vrhc .ricons{position:absolute;rig
ht:8px;top:10px;left:auto;bottom:auto;height:18px;display:inline-
block;cursor:pointer}.vrhol.icons_1 .vrhot{margin-right:27px}.vrhol.icons_2
.vrhot{margin-right:49px}.vrhol.icons_3 .vrhot{margin-right:79px}.vrhol .vrhot
nt,.vsb_tr_chd .vrhol.icons_1 .vrhot{margin-
right:0}.vpb{position:absolute;display:block;bottom:0;left:0;height:4px}.vpb
div{position:absolute}.vpb nt{width:0;background:#fff}.vpb
nt.test{display:none}.vpb.back{background-color:#999}.vrhcp
.vrhol.npb{height:36px;max-height:36px}.vrhol .vadda{width:22px;height:18px;padd
ing:0;margin-right:0;margin-left:2px;bottom:0;position:relative;display:inline-block;z-

```

```

index:1;background:rgba(0,0,0,.75);border-radius:2px;overflow:hidden}.vrhol
.vadda.hide{display:none}.vrhol .vadda .mc_vfaa{margin:3px 5px}.ricons
.vol{float:left}.ricons .adultFlag{float:right}.vol{width:22px;height:18px;bottom:0;m
argin-left:1px;margin-right:1px;position:relative;display:inline-block}.vol.hide,.vol
.hide{display:none}.vol .bg{background:rgba(0,0,0,.75);border-
radius:2px}.vol.bg,.vol nt{position:absolute;bottom:0}.vol .vol.bg.volnb{border-
radius:0 0 2px 2px}.vol .volsliderHandle.bg{border-radius:2px 2px 0 0}.vol nt .volslid
erHandle{height:70px;display:none;width:22px;float:left;bottom:18px;position:absolu
te;display:block}.vol nt .volsliderHandle.hide{display:none}.volsliderHandle
.vsb{height:54px;width:4px;background-color:#999;margin:9px auto
8px;position:relative;display:block;border-radius:2px}.volsliderHandle
.vsh{height:6px;width:14px;padding:9px 7px 9px 7px;margin:0
-12px;display:block;position:absolute;top:30px}.volsliderHandle
.vsh.hide{display:none}.volsliderHandle .vshi{height:4px;width:14px;background-
color:#fff;border-radius:2px}.volMuteIcon{width:16px;height:14px;margin:2px 4px;fl
oat:left}.volMuteHandle{width:22px;height:18px}.vo{background:url(/rp/FFZxBXEIP9
WYOO0jhTaElyLhEVU.svg) no-repeat}.vm{background:url(/rp/fsX-
ZVd03wB2TL0vmQjxSp4U9vs.svg) no-
repeat}.vl{background:url(/rp/YXYMPC1Rry_XJGc7Yg8IR4B2eEs.svg) no-
repeat}.vf{background:url(/rp/NosrlR4amKts1zYxWy3laZN3HRk.svg) no-
repeat}@media(forced-colors:active){.vol{forced-color-adjust:none}}.vrhc line
.vt_vp,.vrhc.popout .vt_vp,.vrhc.mousefollow .vt_vp{position:absolute;bottom:0;borde
r:hidden;padding:0;top:0;left:0;z-index:3}.vrhtc .hide{display:none}.vrh_clc
.vt_vp,.vrh_clc .vrhtc .vrhi,.vrh_clc .player_ol{cursor:pointer}.vrh_clc .cico{border-
radius:0}.vrhtc{border:hidden;top:0;left:0;padding:0}.vrhc.mousefollow
.vrhtc,.vrhc.popout .vrhtc{background-color:#999}.vrhtpc.load
.player_ol{background:url(/rp/J_o2maogFDeUOsovPjL-ofEuxJ4.gif) center center no-
repeat}.vrhc line .vrhtc .vrhi,.vrhc.popout .vrhtc .vrhi,.vrhc.mousefollow .vrhtc .vrhi{p
osition:absolute!important;border:hidden;z-index:2;padding:0;left:0;top:0}.player_ol{
position:absolute;width:100%;height:100%;bottom:0;border:hidden;z-
index:7}.vrhc.popout,.vrhc line,.vrhc.mousefollow{border-radius:6px;overflow:hidden
;display:table-row-group;background:none}.vrhc.popout,.vrhc.mousefollow{z-
index:4;box-shadow:0 4px 4px rgba(0,0,0,.1),0 2px 80px rgba(0,0,0,.2)}.vrhc line{z-
index:1;margin:0}.vrhc.popout,.vrhc
line{position:absolute;top:0}.vrhc.popout{border:1px solid #fff}.vrhc.mousefollow{p
osition:fixed}.vrhcup{position:relative;top:0;left:0;display:table-row}.vrhcup
.vrhtc{position:relative;overflow:hidden}.vrhc.hide{display:none}@keyframes
vh_fadein{from{opacity:0}to{opacity:1}}.vrhc.not(.hide){animation:vh_fadein
250ms}.vrhc line img{color:transparent}.vrhc line.fullsize{height:100%}.vrhc,.vrhc:h
over,.vrhc:link,.vrhc:active,.vrhc:visited{color:#000;text-decoration:none}.vrhc.vrh_c
lc{cursor:pointer}.vrhstat{height:0;overflow:hidden}.grad{width:100%;height:24px;position:
absolute;bottom:0;background:linear-gradient(180deg,rgba(255,255,255,0) 0%,#fff
100%)}.b_drk .grad,.b_dark .grad{background:linear-
gradient(180deg,rgba(41,40,39,0) 0%,#292827
95%)}.b_module_expansion_control{padding-bottom:4px}.b_module_expansion
.b_expansion_wrapper{border-top:1px solid

```

```

#cdcdcd}.b_module_expansion_control.b_module_head>.b_module_expansion
.b_expansion_wrapper{border-top:0}.b_module_expansion .b_expansion_wrapper{border-top:0}.b_module_expansion .b_expansion_wrapper,.b_module_expansion
.b_offpage_expansion a,#b_results .b_module_expansion .b_offpage_expansion
a{color:#666}.b_module_expansion .b_expansion_wrapper
.sv_ch{fill:#666}.b_module_expansion_control.b_module_head>.b_module_expansion
.b_expansion_wrapper,.b_module_expansion_control.b_module_head>.b_module_expansion
.b_offpage_expansion a,#b_results
.b_module_expansion_control.b_module_head>.b_module_expansion
.b_offpage_expansion
a{color:#666}.b_module_expansion_control.b_module_head>.b_module_expansion
.b_expansion_wrapper .sv_ch{fill:#666}#b_context .b_module_expansion
.b_expansion_wrapper{border-top:1px solid #ebeb}#b_context
.b_module_expansion_control.b_module_head>.b_module_expansion
.b_expansion_wrapper{border-top:0}#b_pole .b_module_expansion
.b_offpage_expansion a{color:#666}#b_pole
.b_module_expansion_control.b_module_head>.b_module_expansion
.b_offpage_expansion a{color:#666}#b_context .b_module_expansion
.b_offpage_expansion a{color:#666}#b_context
.b_module_expansion_control.b_module_head>.b_module_expansion
.b_expansion_wrapper,#b_context
.b_module_expansion_control.b_module_head>.b_module_expansion
.b_offpage_expansion a{color:#767676}#b_context
.b_module_expansion_control.b_module_head>.b_module_expansion
.b_expansion_wrapper
.sv_ch{fill:#767676}.b_btnContainer{width:100%;height:46px;border-radius:0 6px
6px 0;position:absolute;bottom:-20px}.b_CompactExpansion:active{background-color:
:#00526b}.b_CompactExpansion:hover{background-color:#106ebe;cursor:pointer}.
b_CompactExpansion{background-color:#106ebe;color:#fff;border-radius:16px;height:
:30px}.b_CompactExpansion{display:inline-block;line-height:30px;text-align:center;
padding-left:16px;padding-right:16px;position:relative;left:50%;transform:translateX(
-50%);bottom:-11px;z-index:4;pointer-events:auto}html[dir="rtl"]
.b_CompactExpansion{transform:translateX(50%)}.b_CompactExpansion .b_arrow{margin-left:7px;margin-bottom:-1.75px;display:inline-block;height:.75em}.b_algo_group .b_CompactExpansion .b_arrow{margin-left:3px;height:7px;margin-bottom:0;width:12px}.b_CompactExpansionBtnText{font-family:inherit;font-style:normal;font-weight:400;font-size:13px;line-height:20px;color:#fff;display:inline-block}

```

## Contact Us

For more information, pricing, or custom network solutions, please contact us:

Website: <https://www.hashherbcafe.co.za>

Email: [hello@hashherbcafe.co.za](mailto:hello@hashherbcafe.co.za)

Phone: +27 63 814 7295

Address: 15 Galaxy Road, Linbro Business Park, Johannesburg, 2065, South Africa

This document is for informational purposes only. Specifications subject to change without notice.

