

The title "TECHNICAL SPECIFICATIONS" is centered within a white rectangular frame. The frame has a thin white border and a subtle drop shadow, making it stand out against the dark blue background. The text is in a bold, white, uppercase, sans-serif font.

# TECHNICAL SPECIFICATIONS

# TECHNICAL SPECIFICATIONS

## INDEX

<b>GENERAL INFORMATION</b>	<b>03</b>		
Delivery of the creatives	04	Sitebar	21
Delivery of advertising	05	(Mobile) Understitial (Interscroller)	23
HTML5	06	Video Understitial / Vertical Video	25
SSL-capability	11	Wallpaper	27
Sound	12	Fireplace / Video Takeover	28
		Native Teaser	31
<b>IN-PAGE AD FORMATS</b>	<b>13</b>	<b>OUT-STREAM AD FORMATS</b>	<b>33</b>
Super Banner	14	(Mobile) In-Text Roll	34
Skyscraper / Wide Skyscraper	15		
(Mobile) Medium Rectangle	16	<b>IN-STREAM AD FORMATS</b>	<b>36</b>
Ad Bundle	17	(Mobile) Pre-Roll	37
Mobile Content Ad	18		
Billboard Ad	19	<b>Contact</b>	<b>39</b>
(Mobile) Half Page Ad	20		



# GENERAL INFORMATION

# TECHNICAL SPECIFICATIONS

## GENERAL INFORMATION FOR DELIVERY OF THE CREATIVES

- For the delivery of the creatives please only use the following email address: [trafficde@hi-media.com](mailto:trafficde@hi-media.com)
- All creatives have to comply with the technical specifications, otherwise they cannot be used and the campaign's launch can be delayed.
- Please deliver the **standard creatives three business days\*** prior to the campaign's launch. **Special creatives have to be delivered at least five business days\*** prior to the campaign's launch to ensure a smooth delivery.
- In order to assign the creatives, please provide the following information at the time of delivery:
  - Agency/client
  - Campaign name
  - Campaign period
  - Booked placement
  - Target URL
  - Contact person for any queries
  - Creatives-/design name

# TECHNICAL SPECIFICATIONS

## GENERAL INFORMATION FOR DELIVERY OF ADVERTISING

- HiMedia basically delivers tags over (friendly) iFrames. Several redirects, especially for expandable ad formats, must be able to deliver the advertising material out of the iFrame without any problems.
- Transparent areas in the creatives must be non-clickable, neither may they trigger actions (e.g. expand).
- It's not allowed to use Javascript frameworks such as e.g. jQuery or vanilla JS in creatives.
- The target URL must be fully functional by campaign start and has to link to a functional website.
- Creatives which mislead the user are prohibited.
- In case of late delivery of advertising materials or unscheduled pausing, HiMedia reserves the right to extend the campaign's run dates accordingly to the time of creative delivery delay or pausing in order to meet the contractually agreed targets.
- If an unscheduled break is necessary during the campaign period, it should be notified in due time (at least one business day\* in advance). Otherwise, a timely break cannot be guaranteed.

# TECHNICAL SPECIFICATIONS

## GENERAL INFORMATION FOR HTML5

### Format / File size

- The formats and sizes (incl. libraries and images) are based on the IAB standards as well as the sizes specified by HiMedia.
- Analogue to websites, HTML5 creatives consist of several elements, which cannot be merged and compressed into a single file analog to flash. These are HTML Files, CSS, Libraries (Javascript, JQuery, etc.), photos and videos.
- To avoid a delay of the construction of the website and the creatives, it has to be pointed out that during the creation process individual elements of HTML5 creatives are kept as small as possible in terms of quantity and file size to minimize the server processes/requests (server requests). For this compilation methods of codes and code optimizations in a file are applied.
- This is implemented by compression and optimization techniques as well as by frugal use of animation and integration of external elements such as fonts and libraries, which will be added to the file size. Under-directory-structures are to be avoided.

### Delivery of creatives

- The delivery of HTML5 creatives must be carried out as a redirect. For special forms of advertising (such as Wallpaper or Fireplace) delivery of each element must be carried out as an iFrame URL. The lead time is 5 business days\*.

# TECHNICAL SPECIFICATIONS

## GENERAL INFORMATION FOR HTML5



### Clicktag

The notation of click tags is: `clickTag`

The notation of multi-click tag is: `clickTag`, `clickTag1`, `clickTag2`, ...

The following lines of code are integrated into the HTML5 creative for transferring the click tags. The function returns all GET parameters which are passed to the file:

```
<script>
var getUriParams = function() {
    var query_string = {}
    var query = window.location.search.substring(1);
    var parmsArray = query.split('&');
    if(parmsArray.length <= 0) return query_string;
    for(var i = 0; i < parmsArray.length; i++) {
        var pair = parmsArray[i].split('=');
        var val = decodeURIComponent(pair[1]);
        if (val != '' && pair[0] != '') query_string[pair[0]] = val;
    }
    return query_string;
}();
</script>
```

# TECHNICAL SPECIFICATIONS

## GENERAL INFORMATION FOR HTML5

### Example HTML and allocation of links:

Two HTML links without assigned links:

```
<a href="#clickTag" id="clickTag">IAB Clicktag</a>  
<a href="#clickTag2" id="clickTag2">IAB Clicktag</a>
```

With these javascript lines the click tagging is allocated to the HTML elements:

```
<script>  
document.getElementById('clickTag').setAttribute('href', getUriParams.clickTag);  
document.getElementById('clickTag2').setAttribute('href', getUriParams.clickTag2);  
</script>
```

### Functional testing of clicktag GET parameter for handing over the creatives

The creatives should be tested for functioning clicktag handover by the creative agency so that unnecessary feedback loops can be excluded.

**Test:** `html5werbemittel.html?clickTag=%LANDINGPAGE%`

`%LANDINGPAGE%` has to be replaced with a test landing page and has to be transferred URL-encoded (encodeURIComponent function).



# TECHNICAL SPECIFICATIONS

## GENERAL INFORMATION FOR HTML5



### Backup image / browser compatibility

- If a browser (e.g. Internet Explorer or Chrome) does not support a special feature or a used library that apply to the creatives, a Fallback JPG/GIF in the creative has to be delivered.
- If the creative is not supported by e.g. IE 9, the agency has to provide the display of the fallback in this browser. The agency has to test the creatives on all current browsers and advise the sales houses of any excludable browsers.

### Image compression

- Graphics have to be optimized in terms of file size. The use of PNG crusher and the use of scalable vector graphics is recommended.

### Animation

- For animations, make sure that these do not burden the CPU client unnecessarily. Several parallel animations and overlapping transparent graphics must be avoided. The use of CSS3 animations or Javascript is to be chosen wisely in terms of CPU and GPU utilization.

# TECHNICAL SPECIFICATIONS

## GENERAL INFORMATION FOR HTML5

### Video

- Videos in HTML5 creatives are integrated via the tag `<video></video>`.
- Ads with videos are provided with a preview image (poster), the video starts as soon as it is loaded or by user interaction on most mobile devices. It should be noted that no click tags can be placed on videos on mobile devices. The clicktag has to be consigned on a space outside the video.
- The video has to be optimized regarding the quality and file size and is to stream in an appropriate server environment. The max. video file size is 2,5 MB.
- The video is also to be submitted in H264/mp4 and VP8/WebM.

### Code example:

```
<video controls height="640" width="360">  
    <source src="yourVideo.mp4" type='video/mp4' />  
    <source src="yourVideo.webm" type='video/webm' />  
</video>
```

# TECHNICAL SPECIFICATIONS

## GENERAL INFORMATION FOR SSL-CAPABILITY



### Mandatory

- Please, make sure that all campaign components (script-, iFrame-, redirect-tags, agency counting pixel or other external hosted resources) are delivered HTTPS compatible in order to exclude indication and measurement errors related to the violation of security adjustments of different browsers across the websites.
- Therefore it has to be ascertained that all resources are hosted on SSL certified servers. Please proof whether your used system provides a standardized option for the creative hosting.
- With this requirement, the Online-Vermarkterkreis (OVK) wants to cope with the developments of the Internet Engineering Task Force (IETF) and its increasing importance of HTTPS compatible advertising resources.

# TECHNICAL SPECIFICATIONS

## GENERAL INFORMATION FOR SOUND



- The sound of the creatives is not allowed to start automatically.
- The start of the sound via MouseOver is not allowed either.
- The sound of the creative may only start through active user interaction (e.g. click on the loudspeaker sign).
- The sound of the creative must have clearly visible control elements and has to be adjustable by visible control elements with regard to ON/OFF control and volume.
- In order not to affect the user experience of a mobile campaign negatively, the volume of the creative must be reasonable. Therefore, please consider the loudness standard EBU R128.



# IN-PAGE AD FORMATS

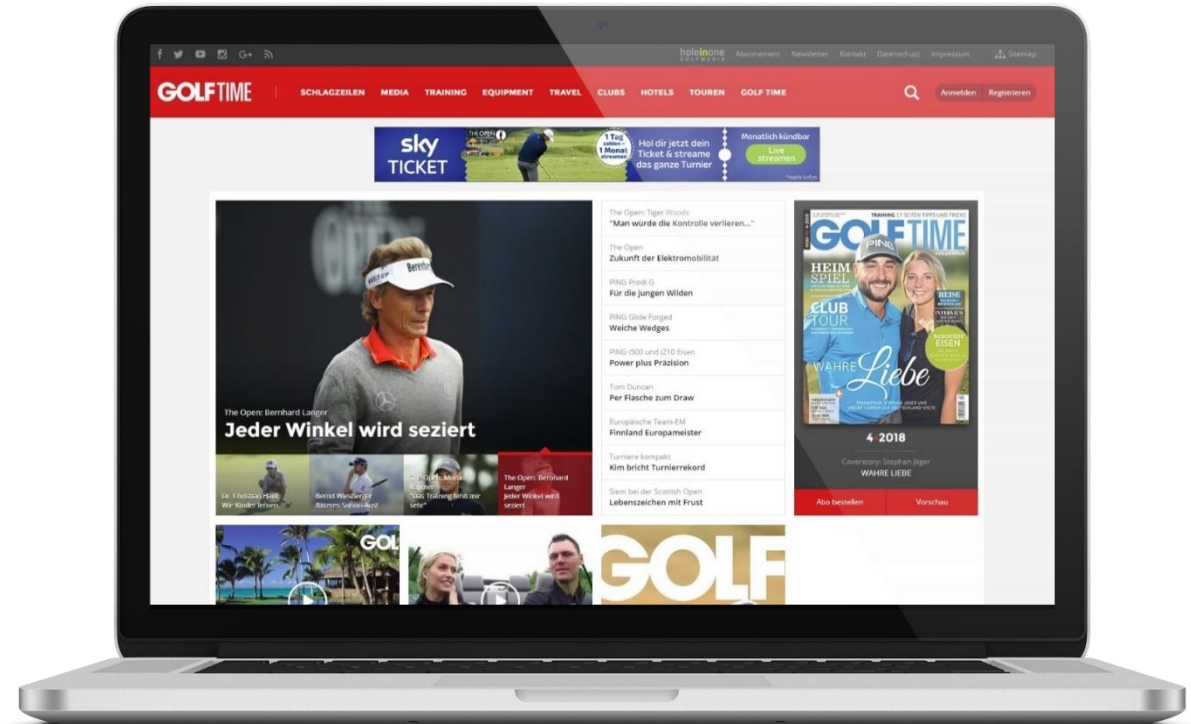
# TECHNICAL SPECIFICATIONS

## SUPER BANNER

- Dimensions (px): 728x90
- File size: max. 40 KB
- File format: GIF/JPG/PNG/HTML5<sup>1</sup>
- Expandable<sup>2</sup>: yes, up to 728x300
- Redirect: yes
- Streaming: yes, max. 30 sec (polite download)

### Note:

- Streaming: Video has to be hosted externally.



<sup>1</sup>only possible as redirect; Initial-Load: 150 KB, Sub-Load: 150 KB; <sup>2</sup>only by click

# TECHNICAL SPECIFICATIONS

## (WIDE) SKYSCRAPER

- Dimensions (px): 120x600 / 160x600
- File size: max. 40 KB
- File format: GIF/JPG/PNG/HTML5<sup>1</sup>
- Expandable<sup>2</sup>: yes, up to 420x600
- Redirect: yes
- Streaming: yes, max. 30 sec (polite download)

### Note:

- Streaming: Video has to be hosted externally.



<sup>1</sup>only possible as redirect; Initial-Load: 150 KB, Sub-Load: 150 KB; <sup>2</sup>only by click



# TECHNICAL SPECIFICATIONS (MOBILE) MEDIUM RECTANGLE

- Dimensions (px): 300x250
- File size: max. 40 KB
- File format: GIF/JPG/PNG/HTML5<sup>1</sup>



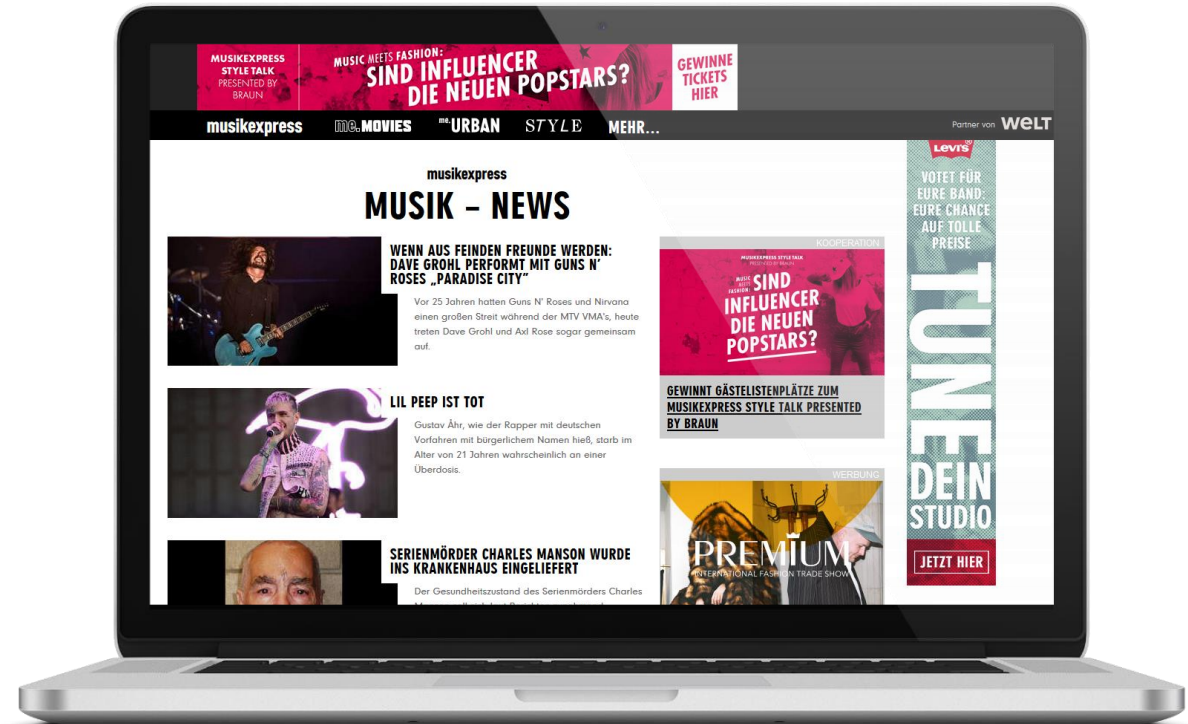
<sup>1</sup>only possible as redirect; Initial-Load: 150 KB, Sub-Load: 150 KB



# TECHNICAL SPECIFICATIONS

## AD BUNDLE

- The Ad Bundle does not represent an own ad format, but it is defined by its fixed combination booking.
- An Ad Bundle booking consists out of three of the following ad formats:
  - Super Banner
  - Skyscraper
  - Wide Skyscraper
  - Medium Rectangle
- The delivery depends on the relative availabilities. The distribution per format has not to be necessarily evenly.



# TECHNICAL SPECIFICATIONS

## MOBILE CONTENT AD (2:1/3:1/4:1/6:1)

### Content Ad 2:1

- Dimensions (px): 300x150 (optionally 320x150)

### Content Ad 3:1

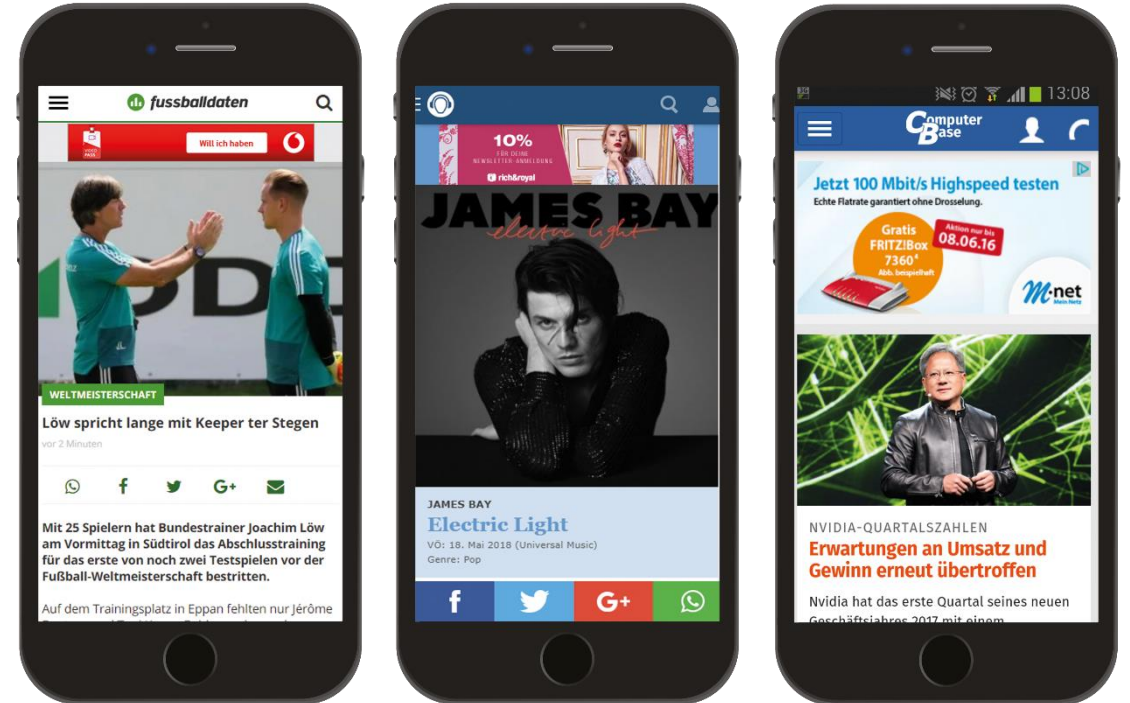
- Dimensions (px): 300x100 (optionally 320x100)

### Content Ad 4:1

- Dimensions (px): 300x75 (optionally 320x75)

### Content Ad 6:1

- Dimensions (px): 300x50 (optionally 320x50)
- File size: max. 15 KB
- File format: GIF/JPG/PNG/HTML5<sup>1</sup>



<sup>1</sup>only possible as redirect; Initial-Load: 150 KB, Sub-Load: 150 KB

# TECHNICAL SPECIFICATIONS

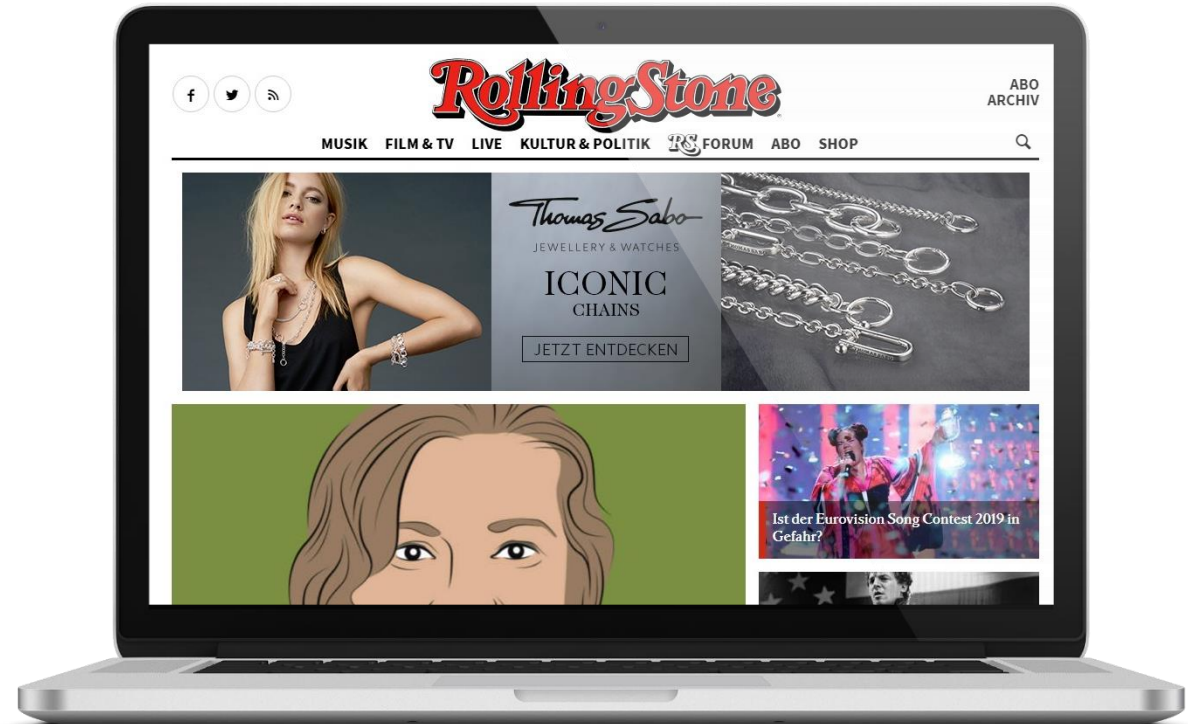
## BILLBOARD AD

- Dimensions (px): 800x250, 850x250, 940x250, 950x250, 960x250, 970x250, 980x250, 990x250, 1000x250, 1005x250
- File size: max. 80 KB
- File format: GIF/JPG/PNG/HTML5<sup>1</sup>
- Redirect: yes
- Streaming: yes, max. 30 sec (polite download)

### Note:

- Streaming: Video has to be hosted externally.
- The billboard with the size of 800x250 is showing the highest distribution and therefore disposes the highest reach. The size 970x250 corresponds to the IAB standard size for Billboards, but may be (due to insufficient content width) unavailable on certain websites, due to insufficient content width.
- Ideally, you deliver both billboard sizes. We will supply the version which visually fits best in the layout of the respective website.

<sup>1</sup>only possible as redirect; Initial-Load: 150 KB, Sub-Load: 150 KB



# TECHNICAL SPECIFICATIONS

## (MOBILE) HALF PAGE AD

- Dimensions (px): 300x600
- File size: max. 80 KB
- File format: GIF/JPG/PNG/HTML5<sup>1</sup>
- Redirect: yes
- Streaming: yes, max. 30 sec (polite download)

### Note:

- Streaming: Video has to be hosted externally.



<sup>1</sup>only possible as redirect; Initial-Load: 150 KB, Sub-Load: 150 KB



# TECHNICAL SPECIFICATIONS

## SITEBAR AD

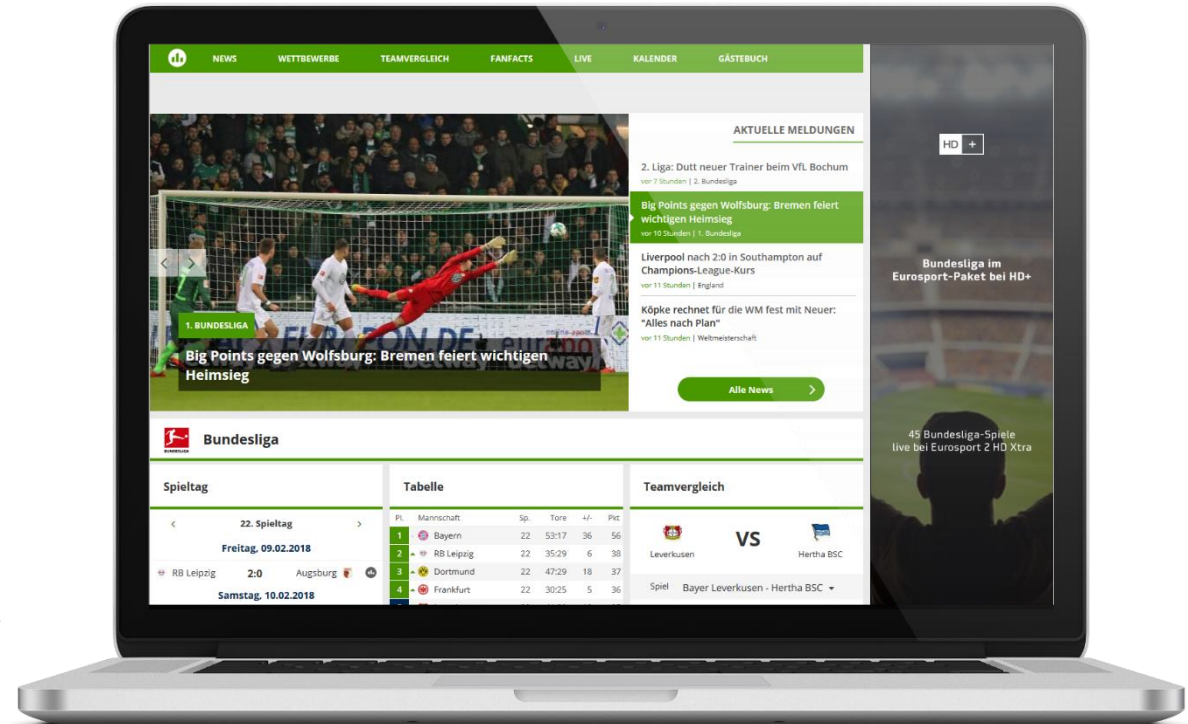
- Dimensions (px): min. 1 / max. viewport x min. 1 / max. viewport
- File size: max. 150 KB
- File format: HTML5 (100% responsive)
- Redirect: yes
- Streaming: yes, max. 30 sec (polite download)

### Note:

- Streaming: Video has to be hosted externally.
- The Sitebar Ad stretches laterally of the content and uses the available space.
- The following sizes apply to the fallback creatives: 120x600, 160x600 or 200x600 pixel (GIF, JPG or PNG) – not-scaling.
- You will find information on delivery on the next sheet.

### Programmatic Buying:

- You can buy the Sitebar Ad programmatically at a size of 220x600. The basic specifications also apply here.

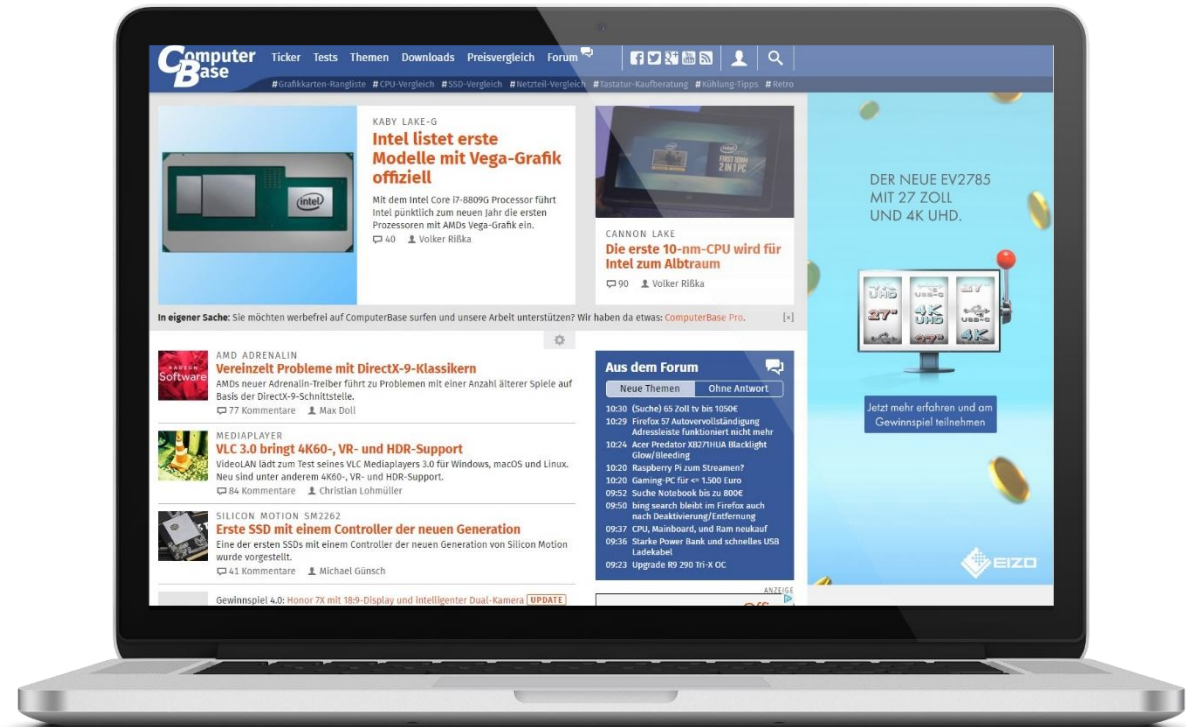


# TECHNICAL SPECIFICATIONS

## SITEBAR AD

### Delivery:

- The Sitebar Ad always has to be delivered to 100% responsively and has to apply dynamically to the entire disposable advertising space. 100% responsively means 100% dynamic scaling in height and width.
- The viewport defines the space right-hand next to the content. The aspect ratio can adopt portrait- and landscape format as well as sizes in between, depending on the available space which is up to the size of the user's browser screen.
- Technically, the ad can adopt to a minimum size of 1x1 pixel and a maximum size of 100% of the Sitebar-viewport-height and -width.
- A fixed size or a fixed aspect ratio is not allowed.
- **The Sitebar Ad creative must not deliver an integrated Sitebar functionality. This functionality will be provided by HiMedia in line with the delivery.**



# TECHNICAL SPECIFICATIONS

## (MOBILE) UNDERSTITAL (INTERSCROLLER)

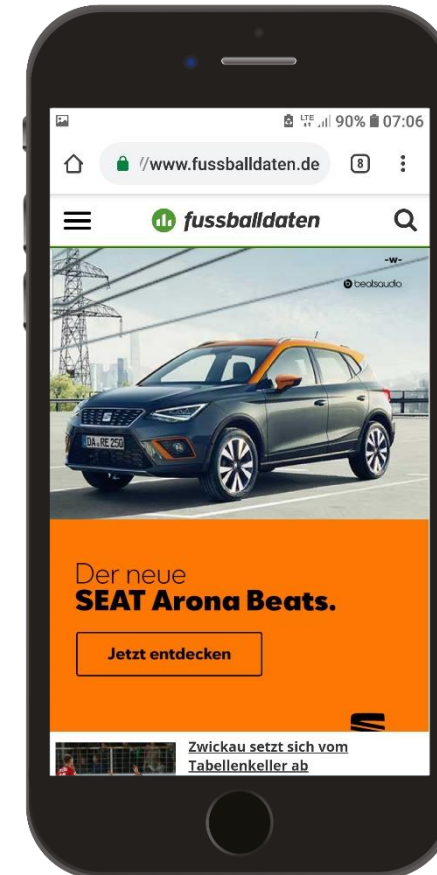
- Dimensions (px): dynamic
- File size: max. 150 KB
- File format: HTML5 (100% responsive)
- Redirect: yes
- Streaming: yes, max. 30 sec (polite download)

### Note:

- Streaming: Video has to be hosted externally.
- The (Mobile) Understitial is fully integrated into the content and lies in the background. The user exposes the advertisement by scrolling.
- You will find information on delivery on the next sheet.

### Programmatic Buying:

- You can buy the „Mobile Understitial“ programmatically „upon request“. The basic specifications also apply here.



# TECHNICAL SPECIFICATIONS

## (MOBILE) UNDERSTITAL (INTERSCROLLER)

### Delivery:

- The (Mobile) Understitial always has to be delivered 100% responsively and has to apply dynamically to the entire disposable advertising space. 100% responsively means 100% dynamic scaling in height and width.
- The viewport defines the space within the content. The aspect ratio can adopt portrait- and landscape format as well as sizes in between, depending on the available space which is up to the size of the user's browser screen.
- A fixed size or a fixed aspect ratio is not allowed.
- **The creative must not deliver an integrated Understitial-/Interscroller functionality. This functionality will be provided by HiMedia in line with the delivery.**
- Physical delivery: Only upon request
- Service:  
On request. we create a responsive HTML5-Redirect for our customers.





# TECHNICAL SPECIFICATIONS

## VIDEO UNDERSTITAL (INTERSCROLLER) / VERTICAL VIDEO

- Dimensions (px): dynamic
- File size: max. 150 KB
- File format: HTML5 (100% responsive)
- Redirect: yes
- Streaming: yes, max. 30 sec (polite download)

### Note:

- Streaming: Video has to be hosted externally.
- The Video Understitial / Vertical Video is fully integrated into the content and lies in the background . The user exposes the advertisement by scrolling.
- Das Video Understitial / Vertical Video will be delivered mobile only (smartphone).
- You will find information on delivery on the next sheet.

### Programmatic Buying:

- You can buy the Video Understitial / Vertical Video programmatically „upon request“. The basic specifications also apply here.



*Video Understitial*

# TECHNICAL SPECIFICATIONS

## VIDEO UNDERSTITIAL (INTERSCROLLER) / VERTICAL VIDEO

### Delivery:

- The Video Understitial / Vertical Video always has to be delivered to 100% responsive and has to apply dynamically to the entire disposable advertising space. 100% responsive means 100% dynamic scaling in height and width.
- The viewport defines the space within the content. The aspect ratio can adopt portrait- and landscape format as well as sizes in between depending on the available space which is up to the size of the user's browser screen.
- A fixed size or a fixed aspect ratio is not allowed.
- **The creative must not deliver an integrated Understitial-/Interscroller functionality. This functionality will be provided by HiMedia in line with the delivery.**
- Physical delivery: Only upon request
- Service:  
On request, we create a responsive HTML5-Redirect for our customers.



*Vertical Video*

# TECHNICAL SPECIFICATIONS

## WALLPAPER

### A Wallpaper consists out of the following elements:

- Super Banner (728x90)
  - Skyscraper / Wide Skyscraper (120x600/160x600)
  - Background colour and/or background picture
- 
- File size : max. 150 KB
  - File format: GIF/JPG/PNG/HTML5<sup>1</sup>
  - Redirect\*: yes
  - Streaming: yes, max. 30 sec (polite download)

### Note:

- Streaming: Video has to be hosted externally.



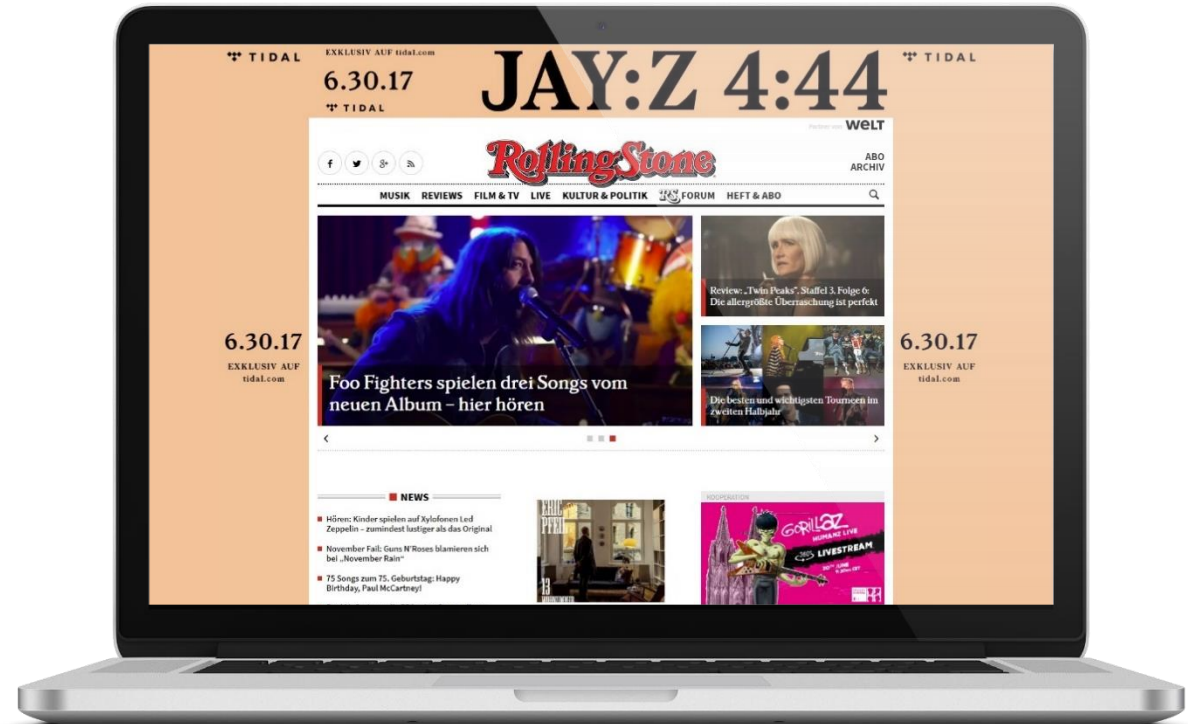
<sup>1</sup>only possible as redirect

# TECHNICAL SPECIFICATIONS

## FIREPLACE / VIDEO TAKEOVER

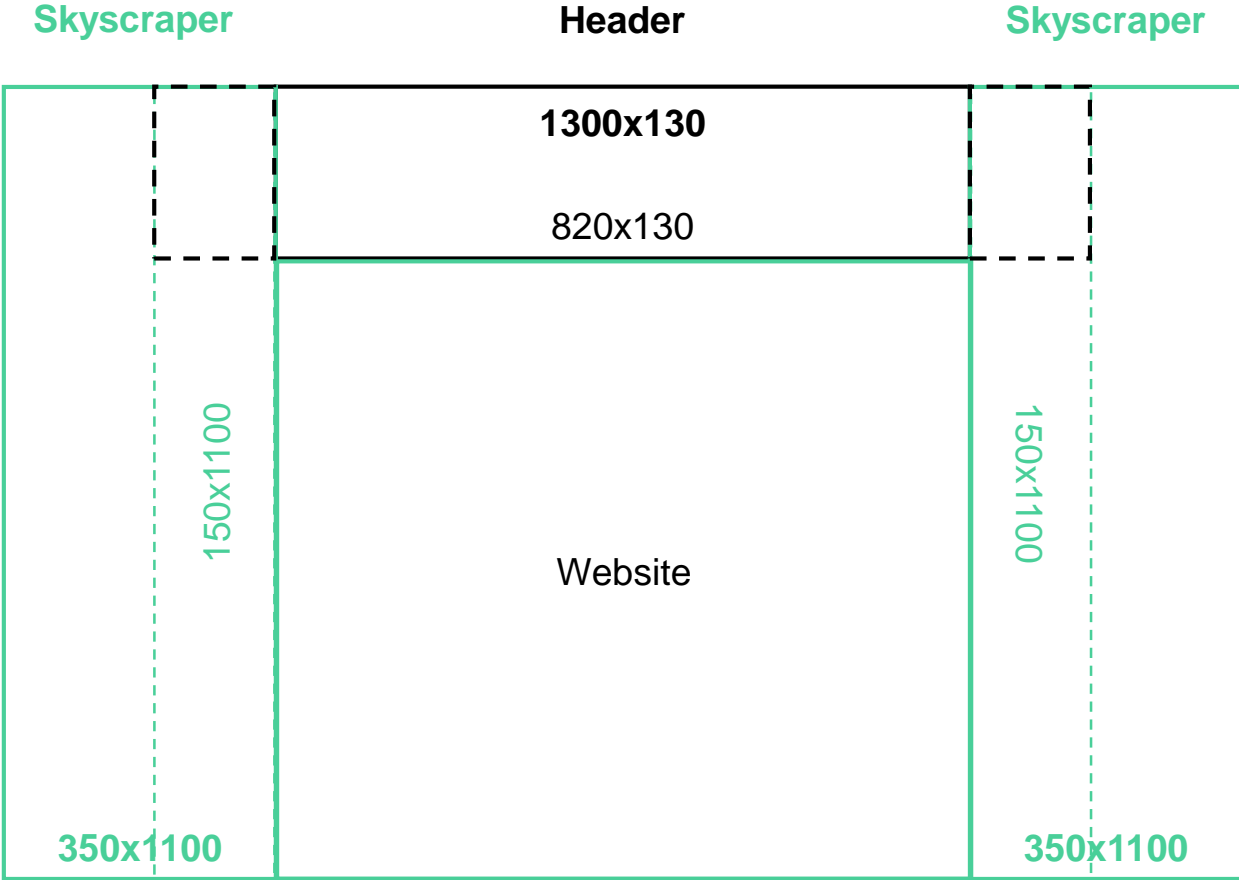
### Implementation:

- the Fireplace consists of a header and two skyscrapers.
- Your special advantage: our technical solution is only a one-off creation effort as the ad format adapts dynamically to the individual sites.
- Alternatively, a background image can be also delivered. In this case, the dynamic adjustments are not applicable.
- The advertising message in the header must only be as large as the smallest width of the page (currently: 820 pixels).
- For Skyscrapers only the inner, content orientated, part (150 pixels) should be used for advertising messages. The Skyscraper elements must not be transparent.
- The height of the Skyscraper may vary, but the width should be 350 pixels. Only this ensures that Skyscraper cover the protruding part of the header also on smaller sites.
- When designing, make sure that there are no transitions between the header and the Skyscrapers that can be seen.



*Fireplace*

TECHNICAL SPECIFICATIONS  
FIREPLACE / VIDEO TAKEOVER



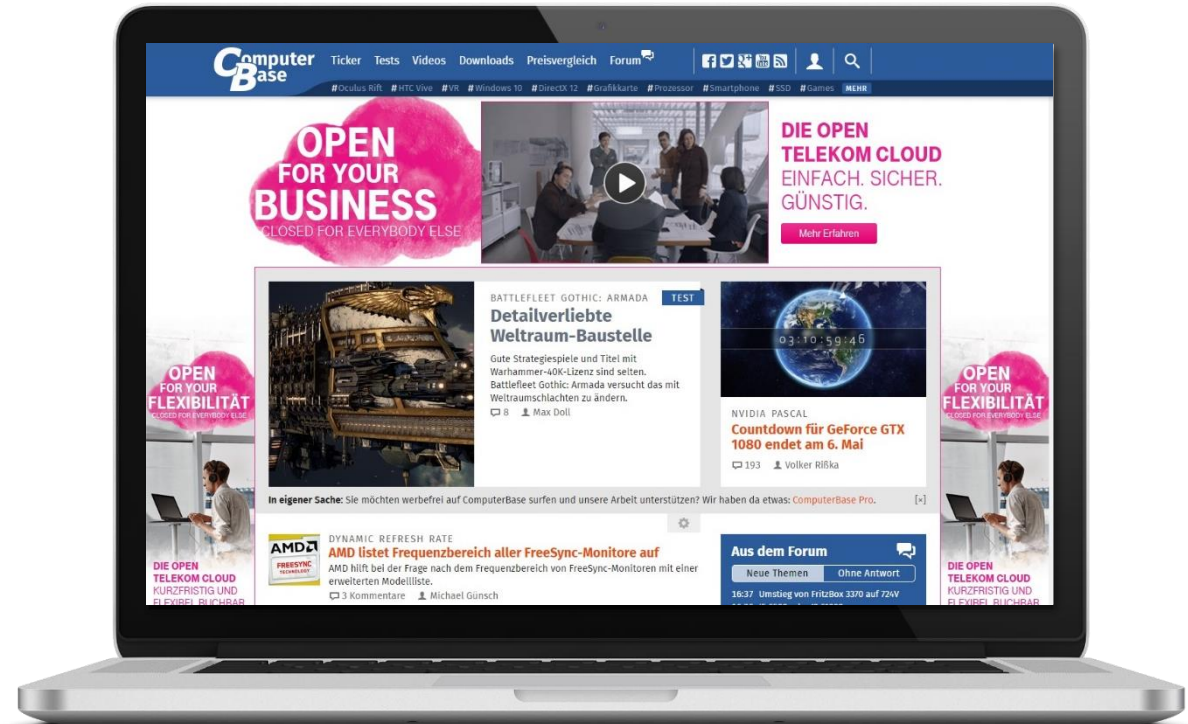
# TECHNICAL SPECIFICATIONS

## FIREPLACE / VIDEO TAKEOVER

- Dimensions (px): 1300x130 (Header), 350x1100 (Skyscraper)
- File size: max. 200 KB (all elements)
- File format: GIF/JPG/PNG/HTML5<sup>1</sup>
- Redirect: yes
- Sticky: yes (Skyscraper elements)
- Streaming: yes, max. 30 sec (polite download)

### Note:

- Video can easily be embedded in the header, but has to be hosted externally (Video Takeover).
- The corresponding path to the video has to be deposited in the creative.
- Additionally, the player has to be deposited in the creative.



Video Takeover

<sup>1</sup>only possible as redirect



# TECHNICAL SPECIFICATIONS

## NATIVE TEASER

- The Native Teaser is a image-text-combination adapting optimally to the look&feel of the respective website and integrating into the editorial reading flow.
- The Native Teaser consists of the following elements:

Obligatory
Titel
Image
Name of the Advertiser
Target-URL

Optional
Teaser-Text
Logo
Call-to-Action (CTA)

### Not allowed:

- Logos as teaser-image
- Frame to the image
- Only text-based graphics
- Integration of external adserver tags



# TECHNICAL SPECIFICATIONS

## NATIVE TEASER

### Delivery

- As websites may vary in design and structure, the Native Teaser will be delivered in different versions. Therefore we recommend to supply the teaser elements also in several versions. Thus we can ensure that an optimal advertisement will be delivered according to the website and placement.
- The image can be delivered in portrait or landscape format as well as quadratically. Depending on the website and placement, the image will be cut at the top/bottom respectively right/left in order to adjust the relative advertising space. The aspect ratio will remain constant. We recommend the delivery of a landscape format (e.g. 16:9) and to center the important content of the image.

ELEMENT	VERSION 1	VERSION 2	VERSION 3	VERSION 4
<b>Titel</b>	15-40 characters*	30-70 characters*	30-70 characters*	30-70 characters*
<b>Teaser-Text**</b>	max. 100 characters*	max. 100 characters*	max. 150 characters*	max. 300 characters*
<b>Image</b>	max. 1.024 px (longest side) GIF, PNG, JPEG	max. 1.024 px (longest side) GIF, PNG, JPEG	max. 1.024 px (longest side) GIF, PNG, JPEG	max. 1.024 px (longest side) GIF, PNG, JPEG
<b>Logo**</b>	50 x 50 px	50 x 50 px	50 x 50 px	50 x 50 px
<b>Name of Advertiser</b>				
<b>CTA**</b>	max. 15 characters*	max. 15 characters*	max. 15 characters*	max. 15 characters*
<b>Target-URL</b>	Proper functioning and leading to a functioning website			

# OUT-STREAM AD FORMATS



# TECHNICAL SPECIFICATIONS

## (MOBILE) IN-TEXT ROLL

### Physical delivery of video ad in raw format (encoding is used):

- We recommend the supply of a MOV file.
- Considering the end device and the available internet connection, the ad server carries out a re-encoding of the video in order to ensure an optimal user experience.
- The maximum file size must not exceed 200 MB.

### Physical delivery of video ads in encoded form:

- Please supply a MP4 file which complies with our quality standards (see next page).

### Delivery as redirect (3rd-Party):

- Please provide the tags based on VAST 2 Standards.
- For further information on VAST 2, please click here: [http://www.iab.net/guidelines/508676/digitalvideo/vsuite/vast/vast\\_copy](http://www.iab.net/guidelines/508676/digitalvideo/vsuite/vast/vast_copy)

# TECHNICAL SPECIFICATIONS

## (MOBILE) IN-TEXT ROLL

### Quality standards

- For delivery of Out-Stream Video Ads, two quality levels are available.

#### High-Quality:

- Dimensions (px): 960x540, 1024x576, 1280x720
- Frame rate: 25 fps
- Aspect ratio: 16:9
- Video codec: H.264
- Video bit rate: 1500 – 2000 kbps
- Audio codec: AAC-LC
- Audio bit rate: 128 kbps
- Total bit rate: max. 2500 kbps

#### Low-Quality:

- Resolution: 512x288, 640x360
- Frame rate: 25 fps
- Aspect ratio: 16:9
- Video codec: H.264
- Video bit rate: 1500 – 2000 kbps
- Audio codec: AAC-LC
- Audio bit rate: 128
- Total bit rate: max. 2500 kbps

### Sound:

- Please, respect the loudness standards [EBU R128](#).



# IN-STREAM AD FORMATS

# TECHNICAL SPECIFICATIONS

## (MOBILE) PRE-ROLL

### Physical delivery of video ads in raw format (encoding is used):

- We recommend the delivery of a MOV file.
- Considering the end device and the available internet connection the ad server carries out a re-encoding of the video in order to ensure an optimal user experience.
- The maximum file size must not exceed 200 MB.

### Physical delivery of video ads in encoded form:

- Please, deliver an MP4 file which complies to our quality standards (see next page).

### Delivery as redirect (3rd-Party):

- Please, provide the tags based on VAST 2 standards.
- For further information on VAST 2, please click here: [http://www.iab.net/guidelines/508676/digitalvideo/vsuite/vast/vast\\_copy](http://www.iab.net/guidelines/508676/digitalvideo/vsuite/vast/vast_copy)

# TECHNICAL SPECIFICATIONS

## (MOBILE) PRE-ROLL

### Quality standards

- For delivery of Out-Stream Video Ads, two quality levels are available.

#### High-Quality:

- Dimensions (px): 960x540, 1024x576, 1280x720
- Frame rate: 25 fps
- Aspect ratio: 16:9
- Video codec: H.264
- Video bit rate: 1500 - 2000 kbps
- Audio codec: AAC-LC
- Audio bit rate: 128 kbps
- Total bit rate: max. 2500 kbps

#### Low-Quality:

- Resolution: 512x288, 640x360
- Frame rate: 25 fps
- Aspect ratio: 16:9
- Video codec: H.264
- Video bit rate: 1500 - 2000 kbps
- Audio codec: AAC-LC
- Audio bit rate: 128
- Total bit rate: max. 2500 kbps

### Sound:

- Please, respect the loudness standards [EBU R128](#).

HiMedia Deutschland AG  
Emanuel-Leutze-Straße 8  
40547 Düsseldorf / Germany

### **Ad Operations**

T: +49 (0) 211 - 302 77 - 410

E: [trafficde@hi-media.com](mailto:trafficde@hi-media.com)