

# Specifications

## BTA1 TV transmitter

### Model: BTA1

Power supply	<p><i>Input:</i> 5 V <math>\pm</math>5%, 1000 mA max. (USB power via TV or external USB source)</p> <p><i>Output:</i> 5 V <math>\pm</math>5%, 500 mA max. (USB port for charging headphones)</p>
Inputs	<p><i>Digital input:</i> Optical mini Toslink <i>Supported data streams:</i> Stereo PCM 44.1 – 48 kHz/16 – 24 bit, AC-3 (Dolby Digital) max. bit rate: 640 kbps</p> <p><i>Digital input:</i> HDMI ARC <i>Supported data streams:</i> Stereo PCM 44.1 – 48 kHz/16 – 24 bit, AC-3 (Dolby Digital) max. bit rate: 640 kbps</p> <p><i>Analog input:</i> 3.5 mm stereo jack socket</p>
Temperature range	<p><i>operation:</i> 0 to +40°C</p> <p><i>storage:</i> –20 to +60°C</p>
Relative humidity	<p><i>operation:</i> 10 to 80%, non condensing</p> <p><i>storage:</i> 10 to 90%</p>
Weight	approx. 100 g
Dimensions	approx. 129.9 x 20.4 x 55.9 mm (W x H x D)

### Bluetooth

Version	Bluetooth 5.4 certified, class 1
Transmission frequency	<p><i>BLE 1M:</i> 2,402 MHz to 2,480 MHz</p> <p><i>BLE 2M:</i> 2,404 MHz to 2,478 MHz (without 2,426 MHz)</p>
Profiles	BAP, PBP
Output power	10 mW (max.)
Codec	LC3
Device name	BTA1 TV Transmitter
Number of active connections	Broadcast audio: Recommended less than 250
Modulation	BLE: GFSK

## HDR 275 TV headphones

### Model: HDR 275

Wearing style	wireless headband
Ear coupling	over-ear
Acoustic principle	closed
Connectivity	Bluetooth Auracast™, Bluetooth 5.4, USB
Transducer principle	dynamic
Transducer	37 mm
Frequency response	6 Hz to 22 kHz (-10 dB)
Sound pressure level (SPL)	104 dB SPL (1 kHz/0 dBFS)
THD	<0.3% (1 kHz/100 dB SPL)
Microphone principle	MEMS
Microphone frequency response	50 Hz to 10,000 Hz (-3 dB)
Microphone pick-up pattern (speech audio)	2 omni-directional microphones
Power supply	replaceable, rechargeable lithium-polymer battery: 3.7 V <sup>nom</sup> , 420 mAh, 1.554 Wh USB charging via USB C socket: 5 V <sup>nom</sup> , 500 mA max.
Charging time of rechargeable battery	approx. 2 hrs
Operating time	up to 50 hrs (music playback via Bluetooth, AAC codec, medium volume level)
Temperature range	<i>operation</i> : 0°C to +40°C <i>charging</i> : +5°C to +40°C <i>storage</i> : -20°C to +60°C
Relative humidity (non condensing)	<i>operation</i> : 10 to 80% <i>storage</i> : 10 to 90%
Weight	approx. 195 g
Magnetic field strength	1.9 mT

### Bluetooth

Version	Bluetooth 5.4 certified, class 1
Transmission frequency	<i>Classic BDR/EDR and BLE 1M</i> : 2,402 MHz to 2,480 MHz <i>BLE 2M</i> : 2,404 MHz to 2,478 MHz (without 2,426 MHz)
Modulation	<i>BLE</i> : GFSK <i>BT Classic BR &amp; EDR</i> : GFSK, $\pi/4$ DQPSK, 8DPSK
Profiles	A2DP, AVRCP, HFP, HSP, GATT, PBP, BAP
Output power (RF)	10 mW (max.)

Audio codec	LC3, aptX™, aptX™ Adaptive, SBC, AAC
Device name	HDR 275
Number of active connections	2

#### Compatible battery (BA 275)

Nominal voltage	3.7 V $\approx$
Minimum capacity	420 mAh
Discharge current	0.2 C
Discharge cut-off voltage	3.0 V
Discharge temperature range	-20 to 60°C
Charging end voltage	4.2 V
Charging current (3.0 – 4.2 V)	1.0 C (15 – 45°C), 0.2 C (0 – 15°C)
Charging current (<3.0 V)	0.2 C
Charge cut-off current	0.05 C
Charge temperature range	0 to 45°C
Mechanical dimensions	41.0 mm ( $\pm$ 0.2 mm) x 24.0 mm ( $\pm$ 0.2 mm) x 8.8 mm ( $\pm$ 0.2 mm)
PCM - Protection Circuit Module	integrated
NTC	10 K $\pm$ 1 %, B = 3435 K
Housing flammability	Metal/UL94V1 or above
Plug	Hirose DF13-4S-1.25C, pin 1: positive pole, pin 2: NTC, pin 3: unused, pin 4: negative pole