

Quinta MU 21 V

Digital Wireless Delegate Microphone Unit with Voting Function

Order # 726.060



Supplied without gooseneck microphone.

FEATURES

- Delegate microphone unit with 3 buttons and voting function (Yes, No, Abstain for parliamentary votings, Multiple Choice or Opinion Polls)
- Direct Sequence Spread Spectrum (DSSS) provides high immunity from interference and unauthorised listening, even when using other radio systems
- Wireless transmission with integrated True Diversity antenna technology for transmitting and receiving
- Three selectable frequency bands : 2.4 / 5.2 / 5.8 GHz
- Automatic or manual silent change to an interference-free frequency response acc. to EN 3000328 ETSI
- Automatic recognition of interferences in all frequency ranges
- Processor-controlled and automatic audio channel allocation of the microphone units
- Digital 128-bit encryption and additional 24-bit PIN code against unauthorised listening
- Removable gooseneck microphone with Scudio® technology in different lengths, 5-pin XLR connector with hidden lock
- Red LED ring around the gooseneck to indicate the ready-to-talk status of the microphone
- Soft touch silicone buttons with backlit illumination in 3 colours
- Operating panel made of stainless steel
- Microphone button to switch the microphone on / off and two additional buttons, which can be activated for voting
- Voice-controlled activation of the microphone possible
- High-quality plastic housing with a non-glare matt black coating of Alexit soft-touch paint
- Integrated loudspeaker with voice equalisation
- Decreased loudspeaker volume when microphone is switched on
- Adjustable mini stereo jack output (3.5 mm) as documentation or headphones
- Parameters can be programmed via the control unit and the appropriate configuration software
- Automatic Power OFF when the control unit is in the stand-by mode or switched off
- Power on LED
- Charging status of the battery can be monitored and transmitted to the control unit
- Operating control LED indicates the status when the minimum capacity is too low
- Charging contacts for charging the integrated rechargeable batteries in the charging unit
- Reliable processor-controlled charging electronics avoids memory effect and ensures immediate use of the microphone units
- LED ring of the gooseneck microphone indicates the charging status and the power on LED on the rear indicates the use of an external power adapter
- Maximum charging time of 2.5 hours when the battery (NiMH) is completely empty
- DC connection for battery recharging or powering via external power adapter
- Minimum operating time 20 hours

Quinta MU 21 V

DESCRIPTION

The Quinta MU 21 V delegate microphone unit is equipped with one microphone button in the housing with which the participant can switch the microphone on and off as well as two additional buttons, which can be activated for voting. When a voting takes place, the microphone unit is switched into the voting mode where the three buttons (Yes, No, Abstain) are available for parliamentary votings, Multiple Choice or Opinion Polls. The actual operating mode is displayed via coloured backlit buttons.

With the Automatic Channel Allocation function the transmitting channels of the microphone units are allocated automatically. When the microphone button is pressed in the manual operating mode the request-to-talk is received by the control unit (a possible external dual colour LED will illuminate red). Then the control unit checks which of the available receiving channels is free. Then the control unit informs the microphone unit which channel it should use for transmitting. When the channel of the microphone unit is set and checked by the control unit, the microphone is switched on. The ready-to-talk status of the microphone is also indicated by the red LED ring around the gooseneck microphone. In the Request-to-Talk-mode of the discussion system the request-to-talk is received, but the microphone is not switched on. The red LED indicates that the request-to-talk has been received. The microphone is switched on by the operator at the PC by using the "Quinta Conference" software or a media control system. When the microphone button is pressed once again, the delegate clears his/her request-to-talk.

Depending on the configuration with the "Quinta Conference" software the following operating modes are available:

Override: the first microphone is switched off, when the maximum number of switched on microphones is exceeded.

Voice activation: the microphone is switched on, when someone speaks into it.

Push-To-Talk: the microphone button is held down, while the participant is speaking.

The integrated loudspeaker reproduces the audio signal of the whole conference system. Depending on the audio signal routing in the control unit the loudspeaker can reproduce other audio signals such as a wireless microphone in the auditorium.

The parameters of the microphone unit are adjusted via PC by using the "Quinta Conference" software. The parameters are adjusted for all microphone units.

A headphone (e.g. DT 1) can be connected to the documentation output. The volume of the loudspeaker is adjusted and can be controlled with the Quinta CU control unit or a media control system. The ducking level determines the attenuation of the loudspeaker level when the microphone of the microphone unit is switched on. Each microphone unit has its own address. An existing system can be complemented at any time.

The DSSS transmission offers high immunity against unauthorised listening with a 128-bit encryption. In addition to this, the conference system including the appropriate microphone units can be protected with PIN code (24-bit). A microphone unit that does not have the correct PIN code will be identified by the control unit and switched off immediately.

The integrated rechargeable battery allows a minimum operation of the microphone unit of 20 hours depending on the participation in the discussion. As soon as the remaining battery time is below a certain threshold of 1 hour, the power on LED on the rear of the microphone unit will flash or if the system is controlled by PC or a media control system, the low battery capacity can be also indicated. The charging time of a completely empty battery is around 2.5 hours with the integrated processor-controlled charging electronics. Depending on the use of the microphone unit the charging time can be less.

As an option the microphone unit can be powered and charged by a DC power supply adapter.

The microphone unit is switched on by briefly pressing the microphone button once. There are various ways to switch off the microphone unit:

1. Press the microphone button for 3 seconds.
2. Press the standby button of the Quinta CU control unit for 3 seconds to switch off all activated microphone units.
3. Switch off all microphone units via an RS 232 or TCP/IP command from the PC or media control system.
4. Switch off the control unit; after approx. 3 minutes the microphone unit will be switched off.

OPTIONAL ACCESSORIES

Classis GM 115 Q	Condenser gooseneck microphone (electret), cardioid, matt black, 500 mm [19.69"]	Order # 726.095
Classis GM 313 Q	Condenser gooseneck microphone (electret), with Scudio® technology, cardioid, matt black, 300 mm [11.81"]	Order # 724.203
Classis GM 314 Q	same as above, but 400 mm [15.75"]	Order # 724.211
Classis GM 315 Q	same as above, but 500 mm [19.69"]	Order # 724.238
Classis GM 316 Q	same as above, but 600 mm [23.62"]	Order # 724.351

CC2	Modular charging and transport case for 10 Quinta microphone units. . .	Order # 723.967
CC2/600	Charging and transport case for 10 Quinta microphone units with GM 316 Q gooseneck microphone .	Order # 724.572
CD 2	Modular charging and transport unit for 10 Quinta microphone units with GM 313, 314 or 315 gooseneck microphone	Order # 723.975

Quinta MU 21 V

TECHNICAL SPECIFICATIONS

General

Frequency range	2400 – 2483.5 MHz 5150 – 5250 MHz 5725 – 5875 MHz
Modulation	DSSS (Direct Sequence Spread Spectrum) and QPSK/BPSK (Quadrature/Binary Phase Shift Keying) digital signal processing acc. to own standard
Max. number of audio streams	4 useable channels per system
Signal-to-noise ratio	80 dB typ., (unweighted signal-to-noise ratio)
Range between microphone units and control unit	> 100 m [109.36 yds]
Power supply	100 – 240 V AC 50/60 Hz
Approval	world-wide

AVB

Transmission and reception of audio data	acc. to IEC 61883-6
Format of the audio data	AM824
Stream ID Quinta CU	Bit 63 – 16 / MAC address Bit 15 – 0 / X

Quinta MU Microphone Units

Transmitter power	max. 20 dBm per channel and region (average, duty cycle \leq 30%)*
Battery voltage	8 NiMH cells, 2080 mAh
External DC operation	15 V DC (\pm 0.5 V), residual hum < 20 mV, 950 mA

Charging time with charger	max. 2.5 hours when the battery is completely empty
with mains charger adapter	max. 2.5 hours when the battery is completely empty
Loudspeaker	Wide-band, integrated loudspeaker
Volume decrease when Mic On ("Ducking")	15 dB fixed setting
Headphone output	Jack socket (3.5 mm, stereo)
Min. impedance	16 Ω
Power supply	9.6 V with integrated NiMH battery (8 cells)

Operating time depending on the type of the microphone unit	approx. 20 hours in discussion mode, operating time also depends on the volume
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Temperature range (at < 90% humidity)	+10° – +40°C [+50 °F – +104 °F]
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Storage temperature (at < 90% humidity)	-20° – +55°C [-4 °F – +131 °F]
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Dimensions (without microphone)	
Length	173 mm [6.8"]
Width	157 mm [6.18"]
Height	51 mm [2.01"]
Weight	1.7 kg [3.74 lbs]

*The transmitter power can differ from this value due to specific regulations in various countries.

ARCHITECT'S SPECIFICATIONS

The digital wireless microphone unit shall be available as delegate version for votings without microphone. The microphone unit shall provide three buttons. In the normal speech mode only the microphone button shall be active for turning on/off or entering a request to speak. In the voting mode all three buttons are used: Yes / No / Abstain. The actual operating mode shall be displayed by coloured backlit buttons.

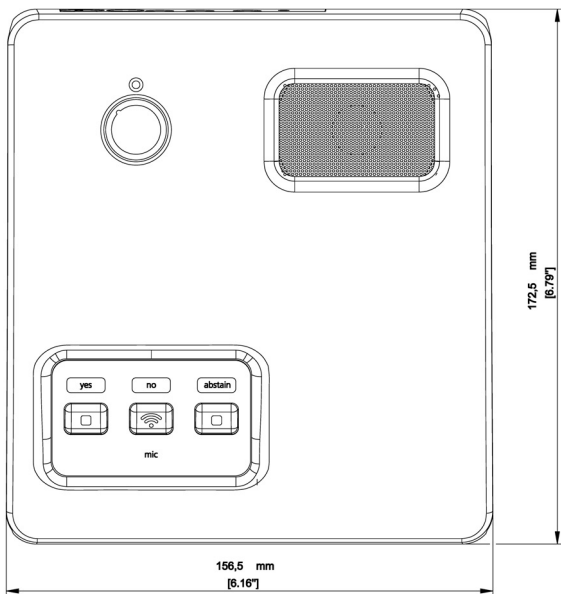
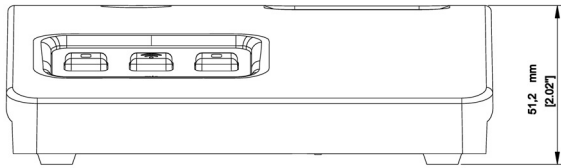
The microphone unit shall provide a 5-pin XLR connector with hidden locking for a gooseneck microphone in different lengths. The DSSS modulation shall ensure high immunity from interference in the frequency range of 2.4 / 5.2 and 5.8 GHz. The true diversity antenna technology shall ensure highest transmission reliability. The digital 128-bit encryption shall include an additional 24-bit PIN code. There shall be an automatic recognition of interferences in all frequency ranges. The silent change to an interference-free frequency range shall be automatic or manual according to the EN 300328 ETSI. The audio channel allocation of the microphone units shall be processor-controlled and automatic. The high-quality plastic housing shall feature a mat black coating with Alexit soft-

touch paint. The integrated wideband loudspeaker shall be used for decentral sound reinforcement. The integrated limiter shall be used against overdrive. The silicone button shall be backlit in 3 colours. The integrated rechargeable NiMH battery shall provide an operating time of max. 30 hours. The processor-controlled, intelligent charging technology shall provide a Quick-Charge function without memory effect and charge the battery within a maximum of 2.5 hours depending on the charging state. The charging status of the battery shall be monitored and transmitted to the control unit. The operating control LED shall indicate the status when the minimum capacity is too low. The microphone unit shall be provided with two nickel-plated charging contacts. The headphone output shall be a mini jack (3.5 mm) socket with adjustable control. The DC connection shall be used for battery recharging or powering via external power adapter. The dimensions (WxHxD) shall be 157x51x173mm [6.18"x2.01"x6.8"]. The weight shall be 1.7 kg [3.74 lbs].

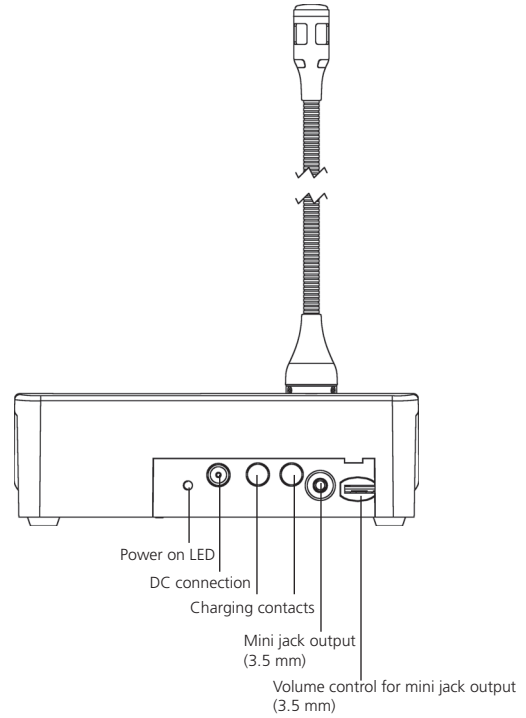
Manufacturer: beyerdynamic
Type: Quinta MU 21 V

Quinta MU 21 V

DIMENSIONS MICROPHONE UNIT

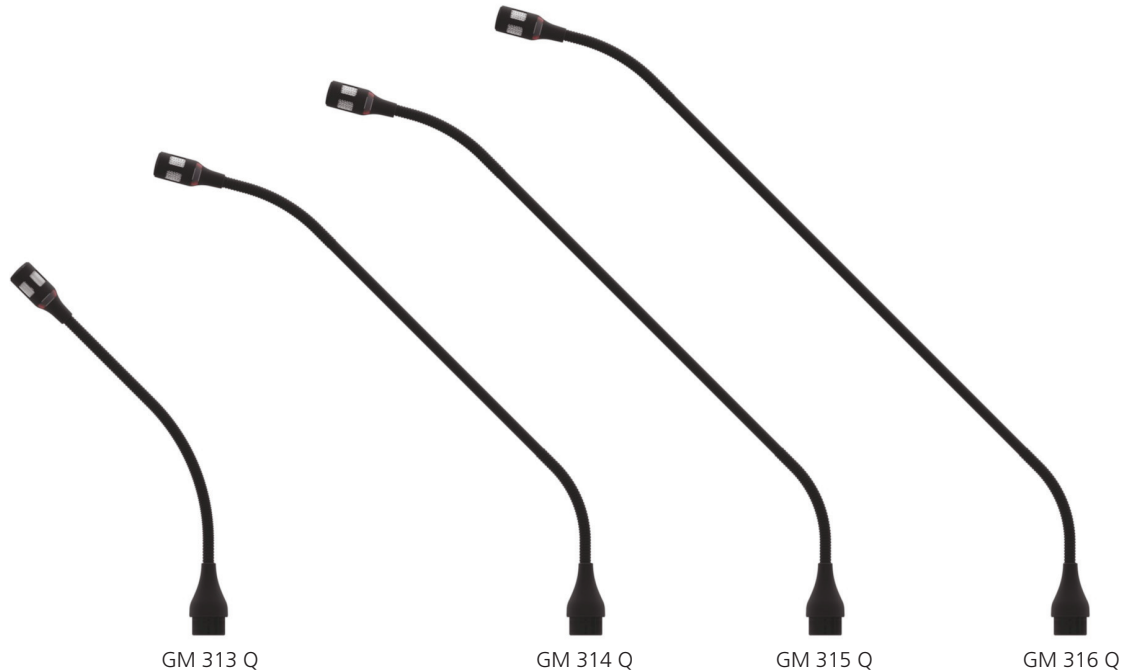


REAR VIEW MICROPHONE UNIT



Quinta MU 21 V

GM 31x Q GOOSENECK MICROPHONE



DESCRIPTION

The GM 31x gooseneck microphone is available as optional accessory to connect to the microphone unit.

Due to the cardioid polar pattern this microphone has a high gain before feedback and provides highest intelligibility of speech. The LED ring displays the ready-to-talk status of the microphone. Inside the microphone there is a filter to eliminate wind and pop noise.

The microphone features the innovative Scudio™ technology, making the microphones absolutely insensitive to wireless communication devices such as mobile phones.

The microphone is mounted on a 6 mm thick gooseneck and due to its mat black, non-glare surface almost invisible.

The following lengths are available:

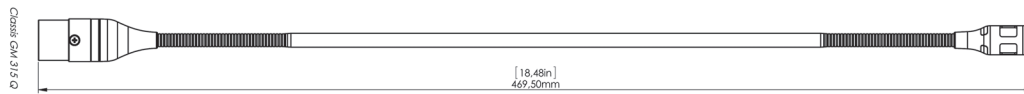
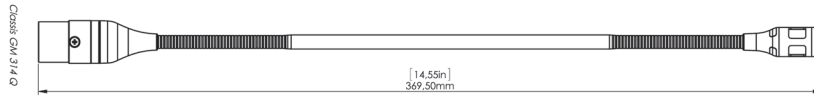
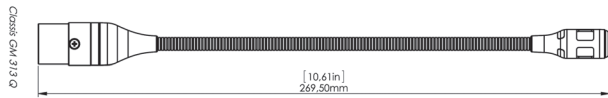
- GM 313 Q = 300 mm [11.81"]
- GM 314 Q = 400 mm [15.75"]
- GM 315 Q = 500 mm [19.69"]
- GM 316 Q = 600 mm [23.62"]

TECHNICAL SPECIFICATIONS

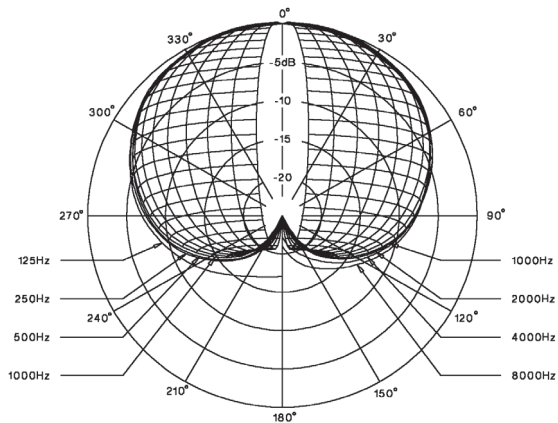
Transducer type	Condenser (electret)
Operating principle	Pressure gradient
Frequency response	50 - 19,000 Hz
Polar pattern	Cardioid
Open circuit voltage at 1 kHz	17 mV/Pa
Nominal impedance	< 200 Ohm
Load impedance	≥ 1 kOhm
Max. SPL	107 dB [SPL @ 1% THD]
Signal-to-noise ratio/Noise voltage	69 dB [A] / 6.0 μV [A]
Equivalent SPL	25 dB[A]
Microphone connection	5-pin XLR (male)
Head diameter with pop shield	approx. 26 mm [1.02"]
without pop shield	approx. 13.6 mm [0.56"]
Gooseneck diameter	6 mm [0.24"]
Total length	
GM 313 Q	270 mm [16.63"]
GM 314 Q	370 mm [14.57"]
GM 315 Q	470 mm [18.5"]
GM 316 Q	570 mm [22.44"]

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GM 31x Q MICROPHONE



POLAR PATTERN



Quinta MU 21 V

ARCHITECT'S SPECIFICATIONS

The cardioid condenser gooseneck microphone (electret) shall be connected to the Quinta desktop microphone unit. The LED ring integrated in the microphone head shall indicate the ready-to-speak status. The filter in the microphone basket shall suppress wind and pop noise. The Scudio® technology shall eliminate interferences from other wireless communication devices. The housing shall be coated with a non-glare mat black paint. The gooseneck diameter shall be 6 mm [0.24"]. The total length shall be 300 mm [11.81"] when connected to the microphone unit (measured from the table's edge). The delivery shall include a wind shield.

Manufacturer: beyerdynamic
Type: Classis GM 313 Q

The cardioid condenser gooseneck microphone (electret) shall be connected to the Quinta desktop microphone unit. The LED ring integrated in the microphone head shall indicate the ready-to-speak status. The filter in the microphone basket shall suppress wind and pop noise. The Scudio® technology shall eliminate interferences from other wireless communication devices. The housing shall be coated with a non-glare mat black paint. The microphone shall be provided of two goosenecks with a diameter of 6 mm [0.24"] and a rigid tube in between. The total length shall be 400 mm [15.75"] when connected to the microphone unit (measured from the table's edge). The delivery shall include a wind shield.

Manufacturer: beyerdynamic
Type: Classis GM 314 Q

The cardioid condenser gooseneck microphone (electret) shall be connected to the Quinta desktop microphone unit. The LED ring integrated in the microphone head shall indicate the ready-to-speak status. The filter in the microphone basket shall suppress wind and pop noise. The Scudio® technology shall eliminate interferences from other wireless communication devices. The housing shall be coated with a non-glare mat black paint. The microphone shall be provided of two goosenecks with a diameter of 6 mm [0.24"] and a rigid tube in between. The total length shall be 500 mm [19.69"] when connected to the microphone unit (measured from the table's edge). The delivery shall include a wind shield.

Manufacturer: beyerdynamic
Type: Classis GM 315 Q

The cardioid condenser gooseneck microphone (electret) shall be connected to the Quinta desktop microphone unit. The LED ring integrated in the microphone head shall indicate the ready-to-speak status. The filter in the microphone basket shall suppress wind and pop noise. The Scudio® technology shall eliminate interferences from other wireless communication devices. The housing shall be coated with a non-glare mat black paint. The microphone shall be provided of two goosenecks with a diameter of 6 mm [0.24"] and a rigid tube in between. The total length shall be 600 mm [23.62"] when connected to the microphone unit (measured from the table's edge). The delivery shall include a wind shield.

Manufacturer: beyerdynamic
Type: Classis GM 316 Q

Quinta MU 21 V

GM 115 Q GOOSENECK MICROPHONE



Classis GM 115 Q without pop shield



Classis GM 115 Q with pop shield

DESCRIPTION

The Classis GM 115 Q gooseneck microphone is used for direct connection to the Quinta or Orbis microphone units.

The microphone features a cardioid polar pattern with a high gain before feedback. The ready-to-speak status of the microphone is displayed by an LED ring. Inside the microphone grille there is a filter to eliminate wind or pop noise.

The microphone is mounted on a 6 mm thick gooseneck and due to its matt black, non-glare surface it discretely blends into the environment.

ARCHITECT'S SPECIFICATIONS

The condenser gooseneck microphone (electret) with cardioid polar pattern shall be used for direct connection to Quinta and Orbis microphone units. A filter inside the microphone grille shall eliminate wind or pop noise. It shall be protected against interference from wireless communication devices. The fully metal housing shall be matt black. The two flexible goosenecks (8 mm bottom, 6 mm top) shall have a rigid tube in between. The total length when mounted to a microphone unit shall be 500 mm (measured from the edge of the table). It shall be supplied with a wind shield.

Manufacturer: beyerdynamic
Type: Classis GM 115 Q

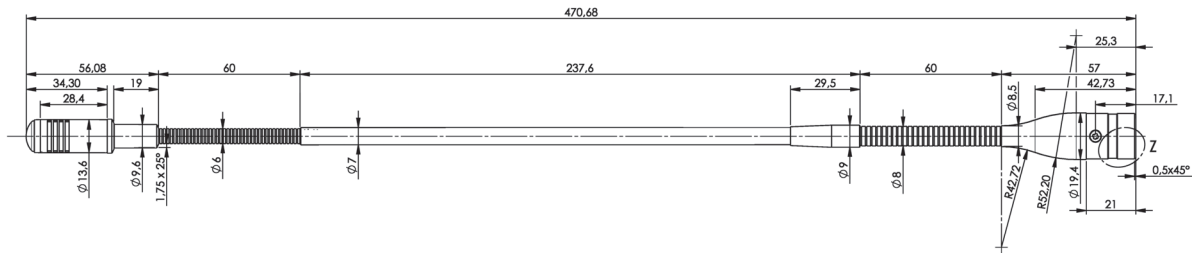
TECHNICAL SPECIFICATIONS

Transducer type Condenser (electret)
Operating principle Pressure gradient
Frequency response
Close miking 40 - 13,000 Hz
Distant miking (distance 1 m) 200 - 13,000 Hz
Polar pattern Cardioid
Open circuit voltage at 1 kHz -17.8 mV/Pa = -35 dBV ±3 dB*
Nominal impedance 2.2 kΩ
Max. SPL 112 dB [SPL @ 1% THD]*
Signal-to-noise ratio 62 dB [A, rms]*
Equivalent SPL 32 dB [A, rms]*
Power supply 1.5 - 9 V DC
Microphone connection 5-pin XLR (male)
Head diameter with pop shield approx. 25 mm [0.98"]
without pop shield approx. 14 mm [0.55"]
Gooseneck diameter approx. 7 mm [0.28"]
Total length approx. 470 mm [18.5"]
Weight approx. 110 g [3.8 oz]

*depending on the connected electronics

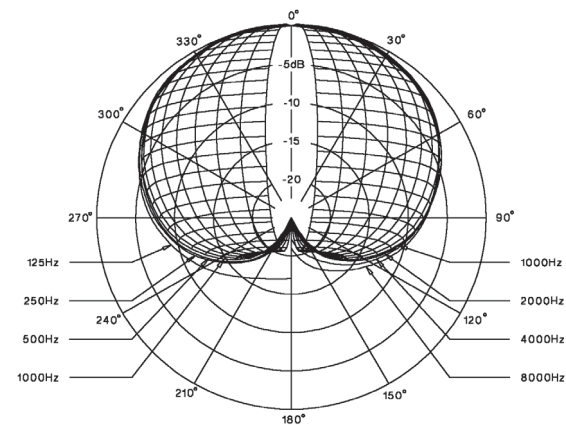
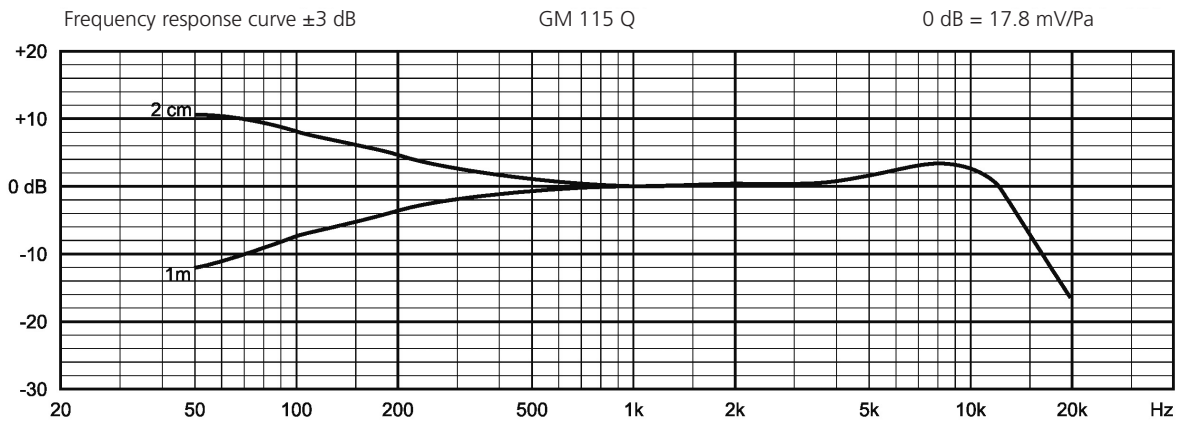
Quinta MU 21 V

DIMENSIONS



FREQUENCY RESPONSE & POLAR PATTERN

This polar pattern and frequency response curve (measuring tolerance ± 3 dB) correspond to a typical production sample for this microphone.



WIRING DIAGRAM

