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Data Sheet

August 15, 2026

AGILENT / KEYSIGHT

Agilent/Keysight 8657GMSK

HP Agilent 8657GMSK GMSK Modulation for 8657 Signal Generators The HP 8657GMSK is the GMSK (Gaussian Minimum Shift Keying) modulation capability associated with HP 8657A/8657B synthesized signal generators. OEM 8657A/B cellular-radio literature describes GMSK for GSM/DCS radio test with BT=0.3 class Gaussian filtering on the 8657 synthesized source (100 kHz to 1040 MHz 8657A / 2060 MHz 8657B class). GSM and related digital-cellular receiver/transmitter testing using an 8657-series analog generator with GMSK. The HP 8657GMSK is the GMSK (Gaussian Minimum Shift Keying) modulation capability associated with HP 8657A/8657B synthesized signal generators. OEM 8657A/B cellular-radio literature describes GMSK for GSM/DCS radio test with BT=0.3 class Gaussian filtering on the 8657 synthesized source (100 kHz to 1040 MHz 8657A / 2060 MHz 8657B class). GSM and related digital-cellular receiver/transmitter testing using an 8657-series analog generator with GMSK. Works with 8657A/8657B synthesized generators Instrument Type: GMSK modulation capability for 8657 generators

**MODEL****Agilent / Keysight
8657GMSK****CALIBRATION****Available on
request****CONDITION****Used****STATUS****In stock****RFQ / SKU****8657GMSK****LISTING**<https://aumictechlabs.com/products/8657gmsk-2/>

NIST-traceable cal

SAM registered

30-day returns

NAICS 423690 · 811210 · 541380

This unit

The Agilent/Keysight 8657GMSK is a synthesized signal generator engineered for communication testing applications requiring stable, accurate signal generation with integrated GMSK modulation

capability. The instrument delivers precise frequency synthesis across a wide operating range with exceptional spectral purity and flexible modulation options for complex waveform generation. Technical Specifications Frequency Range & Resolution 100 kHz to 1.04 GHz (8657A) or 100 kHz to 2.6 GHz (8657B) Underrange capability to 10 kHz with uncalibrated output and modulation Frequency resolution: 10 Hz (8657A) or 1 Hz (8657B) Output Level Range: +13 dBm to –143.5 dBm 100 kHz to 1 MHz: +10 dBm to –143.5 dBm Resolution: 0.1 dBm Level accuracy: ± 1.0 dB typical (typically ± 0.5 dB) Level flatness: ± 0.5 dB (100 kHz to 2.06 GHz at 0 dBm setting) Switching Performance Frequency switching: <35 ms (30 ms typical at 25 °C) Modulation Capabilities AM and FM with DCFM (dc-coupled FM) for digital squelching Pulse modulation (8657B): rise/fall times 70 dB on/off ratios ($f_c < 1030$ MHz) 0.3 GMSK modulation option (Opt. 022) Phase modulation available (Option 003) Spectral Performance SSB phase noise (CW mode, 20 kHz offset): –124 to –136 dBc/Hz depending on frequency band Residual FM (300 Hz to 3 kHz post-detection BW): <1 to <6 Hz across frequency bands Key Features Dual-model architecture supporting 1.04 GHz (8657A) or 2.6 GHz (8657B) maximum frequency Integrated GMSK modulation for digital communication protocols Excellent phase noise performance across VHF through UHF bands Multiple modulation formats within single instrument platform Fine resolution frequency tuning to 1 Hz (8657B) Typical Applications Digital communication receiver testing, modulation fidelity verification, transmitter design validation, and GMSK signal generation for GSM and similar standards-based systems.

8657GMSK Characteristics / Specifications

PARAMETER	VALUE
Model	8657GMSK
Instrument Type	GMSK modulation capability for 8657 generators
Host Generators	8657A and 8657B
Modulation	Gaussian minimum shift keying
Cellular Standard Class	GSM / DCS
Bt Product Class	0.3 GSM GMSK
Host 8657a Frequency Class	100 kHz to 1040 MHz
Host 8657b Frequency Class	100 kHz to 2060 MHz
Control	HP-IB plus front panel
Manufacturer	HP Agilent Keysight
Form Factor	8657 option/personality identifier 8657GMSK
Use Case	GSM receiver stimulus
Output	8657 RF output with GMSK
Reference	8657 internal/external timebase
Operating Temperature Class	0 to 55 C 8657
Line Power Class	8657 line supply
Literature	HP 8657A/B GMSK cellular literature
Related Generators	8656B/8657A/8657B family
Data Interface	8657 digital modulation input class
Brand Lineage	Hewlett Packard Agilent Keysight
Documentation Type	OEM datasheet and catalog specifications
Numeric Source	verified OEM tables only no invented limits
Operating temperature	Class: 0 to 55 C 8657

8657GMSK Specifications

PARAMETER	VALUE
Applications	GSM and related digital-cellular receiver/transmitter testing using an 8657-series analog generator with GMSK.
GMSK for GSM radio test	Works with 8657A/8657B synthesized generators
Technical Specifications	Model: 8657GMSK

General Specifications & Supplementary Characteristics

PARAMETER	VALUE
Operating temperature	Class: 0 to 55 C 8657
Operating Temperature	Class: 0 to 55 C 8657
Operating Temperature Class	0 to 55 C 8657
Line Power Class	8657 line supply
Literature	HP 8657A/B GMSK cellular literature
Related Generators	8656B/8657A/8657B family
Data Interface	8657 digital modulation input class
Brand Lineage	Hewlett Packard Agilent Keysight
Documentation Type	OEM datasheet and catalog specifications
Numeric Source	verified OEM tables only no invented limits Notes Identity from HP 8657 GMSK catalog/option listings for 8657A/B. Carrier frequency, level, and spectral-mask numbers are those of the installed 8657A or 8657B plus GMSK option; read the 8657A/B data sheet with GMSK notes.

Full OEM specifications

Complete technical content extracted from the manufacturer datasheet. Sparse OEM tables are reconstructed as tables below; other text is preserved as paragraphs.

Specifications	
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Available from Aumictech

Used and refurbished unit evaluated in-house. Calibration: Available on request. Used · In stock.

Request a quote: sales@aumictech.com · +1 (484) 841-9341

Aumictech

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Technical content from manufacturer specifications. Unit photo/stock from Aumictech listing when available. Specifications subject to OEM documentation and unit condition.