



GUIDES · API V1

Segments & encoding

You are billed per segment. The encoding your text needs decides how many characters fit in each one — try it below.

Updated 2026-10-10 · generated 2026-10-10 · smsray.com/docs/encoding

Segment counter

Type a message to see how SMSRay will encode and split it. This uses the same rules as the API.

INTERACTIVE COUNTER

The live segment counter is on the web page: smsray.com/docs/encoding.

GSM-7

If every character is in the GSM 03.38 basic or extension table, the message uses GSM-7: **160 characters** fit in one segment. That covers English letters, digits, common punctuation and a few accented letters.

Extension characters cost two septets each, because they are sent as an escape plus the character:

^ { } \ [] ~ | € form feed

UCS-2 and Nepali

A single character outside GSM-7 switches the whole message to UCS-2, where **70 UTF-16 code units** fit in one segment. Devanagari is never GSM-7, so **Nepali text is always UCS-2**. Emoji and other characters outside the Basic Multilingual Plane cost two code units each.

LOOK OUT FOR

Curly quotes (" " ' '), en and em dashes, and non-breaking spaces pasted from documents silently switch a message to UCS-2 and can double its cost.

Long messages

Longer messages are split into parts that the phone joins back together. Each part loses a few characters to the joining header:

ENCODING	SINGLE SEGMENT	PER SEGMENT WHEN SPLIT	6 SEGMENTS (MAX)
GSM-7	160	153	918 septets

ENCODING	SINGLE SEGMENT	PER SEGMENT WHEN SPLIT	6 SEGMENTS (MAX)
UCS-2	70	67	402 code units

An escape pair (GSM-7) or a surrogate pair (UCS-2) is never split across two parts, so a part can end one unit short.

Limits and billing

- A message may use at most **6 segments**. Longer text returns 400 `invalid_request`.
- Empty text is 0 segments and is rejected.
- Cost is your rate for the message `type` × segments, reserved at accept. Your rate is your plan's per-SMS price; see [pricing](#). The reply tells you segments, encoding and cost.
- OTP messages are always one GSM-7 segment.

Keeping costs down

- Keep transactional messages under 160 GSM-7 characters where you can.
- Replace typographic quotes and dashes with plain ASCII before sending English text.
- For Nepali messages, aim for 70 characters or fewer; every 67 more adds a segment.
- Avoid emoji in transactional and OTP messages.

The web page is always the current version: smsray.com/docs/encoding

Full API reference PDF: smsray.com/docs/pdf · Your keys and live examples: app.smsray.com/developers