

Technical Data Tel-O-Graph® GSM

The typical use of the Tel-O-Graph® is single blood pressure and pulse measurement on the upper arm. Optionally, pulse wave analysis with different licenses is possible. The values are analyzed by the accompanying HMS-CS software.

General Performance

Measurement	Oscillometric principle Single blood pressure measurement with automatic transmission
Advanced comfort	IGI (Initially Gradual Inflation): Pressure setting for a gentle measurement SST (Soft Slope Technology): Time adaptation from S-XL sized cuff AF® Logic (Auto-Feedback-Logic): Faster and most convenient measurements
PWA option	Calculation via license system Key A: Central blood pressure Key B: Full Pulse Wave Analysis Key C: Central blood pressure + Augmentation Index @75
Communication	GSM
Measurement range	Systolic (SYS): 60 to 290 [mmHg] Diastolic (DIA): 30 to 195 [mmHg] Pulse (Pulse): 30 to 240 BPM (Beats per Minute)
Pressure range	0 - 300 mmHg
NIBP Accuracy	validated according to ISO 81060-2 and BHS (A/A Grading)
Automatic Transmission	After each measurement
Power supply	Internally powered 6 V: Batteries 4 x LR6 or HR6, Size: AA 1,5 V
Operation and control	Display: LCD Display 70 x 72 mm Acoustic: Beeper Panel: 1 Multifunction button
Memory	350 measurements Blood Pressure or 15 measurements Blood Pressure and Pulse Wave Analysis
Battery capacity	>500 measurements (in case of 2 measurements per day with high-grade batteries (alkaline))
Operation temperature	+5°C to +40°C
Operation humidity	15% to 93% relative humidity, non-condensing
Storage temperature	-25°C to +70°C
Storage humidity	15% to 93% relative humidity, non-condensing
Atmospheric Pressure	700 hPa to 1060 hPa
Weight	Approx. 344 g (without batteries)
Dimensions	L 151 mm x W 108 mm x H 57 mm

Wireless Performance

GSM Chip	Cinterion EHS6
Frequency bands	GSM/GPRS/EDGE: Quad band 850/900/1800/1900MHz UMTS/HSPA+: Five band 800/850/900/1900/2100MHz
Transmission output power	Class 1, 3, 4 and E2 (2 W) for 800MHz and 2100MHz
Internet Access	Default for APN, User, Password and DNS released by IEM
Infrared transceiver	Range up to 1.5 meters
Data transfer identification	Serial number

Maintenance Service

- Remote service: Debugging, Transfer status
- Data Synchronisation: ADR (Acknowledgment for data receipt by the database) - data integrity (100% service level)
- Infrared Interface: Calibration for Blood Pressure Module

Cuff Sizes

- S: 20 – 24 cm (7.9 – 9.5 inch)
- M: 24 – 32 cm (9.5 – 12.6 inch)
- L: 32 – 38 cm (12.6 – 15 inch)
- XL: 38 – 55 cm (15 – 21.7 inch)

Applicable Standards & Directives

- Directive 93/42/EEC (MDD) Class IIa, Annex IX, rule 10,
- Directive 2014/53/EU (RED)
- Directive 2011/65/EU (RoHS)
- IEC 60601-1: 2012, IEC 60601-1-2: 2014, IEC 60601-1-6: 2013, IEC 60601-1-11: 2015
- IEC 80601-2-30: 2013
- FCC 47 CFR Part 15
- ETSI EN 301 489-1 V2.1.1 (2017-02)
- ETSI EN 301 489-52 V1.1.0 (2016-11)
- IEEE/ANSI C63.27-2017
- FDA 510(K) (only without PWA option)