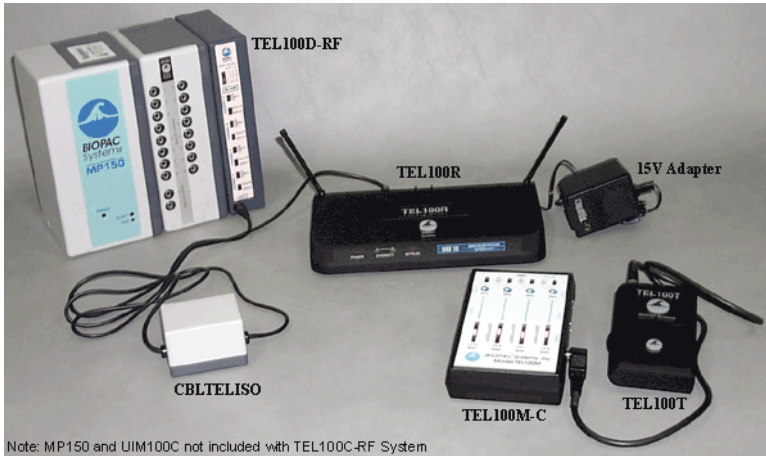


TEL100C-RF WIRELESS REMOTE MONITORING SYSTEM – 110 V
TEL100C-RFA WIRELESS REMOTE MONITORING SYSTEM – 220 V



Note: MP150 and UIM100C not included with TEL100C-RF System

See **Application Note #AH126** for setup and, operational guidelines, and a comparison to the TEL100C specs.

Each **TEL100C-RF** system includes:

- TEL100D-C receiver module
- TEL100M-C portable 4-channel amplifier/transmitter (wireless set includes TEL100T transmitter and TEL100R receiver)
- TEL100-RFL radio frequency link
- or
- TEL100-RFLA radio freq link 220 V
- CBL119 2-meter connection cable (RCA-M to 1/4-M mono)

The TEL100C-RF/RFA system offers a completely wireless transmission scheme to record data while subjects are mobile and/or physically distant (75-150 meters) from the recording system. The TEL100C-RF/RFA will work with the current MP System and any other standard 100-series amplifiers. Use with BIOPAC SS series Simple Sensor transducers and electrodes.

The TEL100C-RF/RFA system includes a portable amplifier/transmitter, which converts up to four channels of data into a modulated data stream. This data stream is transmitted to the receiver module, and then the receiver demodulates the data and sends it to the MP System for recording and analysis. Up to four TEL100C-RF/RFA module sets can be used with a single MP System, allowing up to 16 channels of transmitted data originating from up to four distinct locations. Each channel incorporates a switchable, non-distorting 50/60 Hz interference filter. Gain and bandwidth can be adjusted independently for each channel.

BIOPAC does not recommend converting the wireless TEL100C-RF to a tethered system; TEL100C-RF components are not optimized for tethered physiological recordings. For tethered remote monitoring, use the [TEL100C System](#).

TEL100C-RF/RFA SPECIFICATIONS

NOTE -RFA uses 230 V adapter and Euro connectors

Number of Channels:	4
Channel Bandwidth:	500 Hz or 35 HzLPN (low pass filters)
Notch Filters:	50 or 60 Hz (user selectable on side panel); Independent bandwidth per channel
Sampling Rate:	2000 Hz (per channel)
Encoding:	TDM-DSB/LC-FM
Channel Gain Control:	10 levels: 50, 100, 200, 500, 1000, 2000, 5000, 10000, 20000, 50000
Input Signal Level:	Max: ± 50 mV
Offset Control:	Yes
AC/DC Coupling:	DC, 0.05 Hz and 0.5 Hz
Transducer Excitation:	± 5 V @ 20 ma (total max current from four channels)
Transmit Frequency Options:	Four channels (selected group ranging from 170 to 216 MHz)
Transmit Frequency Stability:	$\pm 0.005\%$ (crystal controlled)
RF Power Out:	50 mW (max allowed by FCC)
Transmission Range:	75 meters (nominal), 150 meters (line-of-sight)
Signal/Crosstalk Ratio:	35 dB (nominal)
Signal/Noise Ratio:	0.05-35 Hz: 40 dB (nominal); 0.05-500 Hz: 35 dB (nominal)
Pk-Pk Noise:	Voltage (Shorted Inputs): 0.28 μ V rms (0.1-10 Hz)

BIOPOTENTIAL AMPLIFIERS (IN TEL100M-C):

Input Impedance:	2 M Ω (differential)
CMRR (1 k Ω source imbalance):	110 dB min. (50/60 Hz); see Shield Drive Operation
CMII:	Common 11 M Ω (DC), >1000 M Ω (50/60 Hz)
CMIV:	± 7 V (referenced to amplifier ground)

Component Dimensions and Weight:

TEL100D-C:	10.92cm x 19.05cm x 4.06cm (0.397 kg)
TEL100M-C:	8.89cm x 14.22cm x 3.05cm (0.312 kg w/ battery)
TEL100T:	6.38cm x 10.57cm x 2.41cm (0.120 kg w/ battery)
TEL100R:	12.98cm x 20.50cm x 4.09cm (0.450 kg)

Pin-outs TEL100M-C:	Female DSUB 9 connector
	pin 1: Shield Drive
	pin 2: Vin+
	pin 3: Ground
	pin 4: Vin-
	pin 5: Shield Drive
	pin 6: Vref+ (+5 V excitation at 5 μ A nominal)
	pin 7: no connection
	pin 8: no connection
	pin 9: Vref- (-5 V excitation at 5 μ A nominal)