C5 – B5 – A9 – M1
Comparison of Micro-Pulse models

Which Micro-Pulse is right for you?
# Overview

All Micro-Pulse DigiCeutical™ products use the same core I.C.E.S.™ technology. Choose the best one for you:

<table>
<thead>
<tr>
<th>Model</th>
<th>Features</th>
<th>Suggested Users</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A9</strong> and variants: Matrix Pulse, 5pps, ...</td>
<td>Can be worn during the day or night</td>
<td>individuals, for daily use</td>
<td>single-location, anywhere needed</td>
</tr>
<tr>
<td><strong>C5</strong></td>
<td>Uses ICES gen 5.0 technology. All other models are gen 6.0</td>
<td>experienced Micro-Pulse users, for daily use</td>
<td>multiple areas (up to 4 coil pairs simultaneously)</td>
</tr>
<tr>
<td><strong>B5</strong></td>
<td>Not wearable like the A9, or M1, can be used while sitting or lying down.</td>
<td>scientists, clinical researchers and serious self-hackers.</td>
<td>The model B5 is designed for scientific and clinical research</td>
</tr>
</tbody>
</table>

Hardware is identical to the model C5, but firmware is much more complex.

Suggested Users: scientists, clinical researchers and serious self-hackers.

Applications: The model B5 is designed for scientific and clinical research and offers an additional level of control over each protocol. More difficult to use than the C5, but offers greater flexibility.
Overview

All Micro-Pulse DigiCeutical™ products use the same core I.C.E.S.™ technology. Choose the best one for you:

M1

Our most portable system, 25% less size and mass than the A9, easily wearable in clothing or bandages, used day or night
Suggested users: anyone, for daily use
Applications: single-location, anywhere needed
15 power levels and 30 pre-set protocols

The model M1 is built with the most advanced generation 6.0 ICES architecture, running a modified version of the firmware on the model C5. Unlike the model C5 or A9, the M1 output is not designed to support more than one set of coils, but it can drive the 2x2 coil array. Only single pairs of coils, without an audio splitter, or a 2x2 array should be used with the Model M1. Also unlike the models B5 and C5, the M1 uses a camcorder battery, and is thinner and smaller than the model A9. The model M1 is designed to be worn any time day or night, and can be tucked away in clothing, bandages or braces. Short coils are recommended for convenient placement of the M1 near the site of injury.

The M1 uses a compact, inexpensive camcorder battery: type DLI88
Quick Selection Guide

• For the most affordable, simplest, portable and wearable ICES system using reliable ICES gen 5.0 technology: choose a **model A9**

• For ultra-portability with many protocol options, the new ICES gen 6.0 technology and a single set of coils: choose **model M1**

• For stationary use in bed or while seated using up to 4 sets of independently powered coils or arrays, and many protocol options with ICES gen 6.0 technology: choose **model C5**

• For stationary use in scientific experiments using up to 4 sets of independently powered coils or arrays, and adjustable protocol options with ICES gen 6.0 technology: choose **model B5**
List of Available Protocols on the model A9

The model A9 has only one protocol, optimized for severe chronic pain and orthopedic injury. This protocol runs automatically every time you power up the model A9. If you need different protocols and ultra-portability, you should consider the Model M1.
List of Available Protocols on the model C5

Standard ICES Protocols:
-- C5 (same as B5, but not adjustable)
-- A9 original
-- P2 (SomaPulse, AllevaWave, ...)
-- Omni 8 (same as Omni 1, but not adjustable)

Schumann Resonances:
-- Schumann 1 (7.83 pps)
-- Schumann 2 (7.83, 14.3 pps)
-- Schumann 3 (7.83, 14.3, 20.8 pps)
-- Schumann 4 (7.83, 14.3, 20.8, 27.3 pps)
-- Schumann 5 (7.83, 14.3, 20.8, 27.3, 33.8 pps)

Sub-threshold continuous TMS modes:
-- scTMS 10pps 30 minutes
-- scTMS 10pps 60 minutes

Constant Frequency (continuous):
-- 1 pps
-- 2 pps
-- 3 pps
-- 4 pps
-- 5 pps
-- 10 pps

CNS/cortex wave patterns:
-- alpha wave entrainment
-- beta1 wave (low range)
-- beta2 wave (mid range)
-- beta3 wave (high range)
-- delta wave
-- theta wave
-- mu wave
-- SMA wave
-- gamma wave
List of Available Protocols on the model B5

The B5 can generally provide any protocols that are available on the C5, but this requires more detailed programming for each protocol. Note that the B5 does NOT have a timer, so it is unable to generate the timed TMS modes available on the C5.

Standard ICES Protocols:
-- B5 (same as C5, except B5 is adjustable)
-- A9 original
-- P2 (SomaPulse, AllevaWave, ...)
-- Omni 1 (same as Omni 8, and is adjustable)

Schumann Resonances:
-- Adjust any of the first 5 resonances from 0 to 255 minutes duration

Sub-threshold continuous TMS modes:
-- not available, this is equivalent to 5 pps, but the B5 does not have a timer

HOLD One Constant Frequency:
-- Select any one frequency (pulses per second) from this table:
  0.5, 0.6, 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9,
  2.0, 2.2, 2.4, 2.6, 2.8, 3.0, 3.2, 3.4, 3.6, 3.8, 4.0, 4.2, 4.4, 4.6, 4.8,
  5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10, 11, 12, 13, 14, 15,
  16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33,
  34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 50, 55, 60, 65, 70, 75,
  80, 85, 90, 95, 100, 110, 120, 130, 140, 150, 160, 170, 180, 190,
  200, 210, 220, 230, 240, 250, 260, 270, 280, 290, 300 (pps)

WAVE Patterns:
-- can generate a 10-step ramp back and forth between any two of the frequencies listed above up to 50 pps. Ramp time is programmable from 1 to 255 minutes.
List of Available Protocols on the model M1

Standard ICES Protocols:
-- C5 (same as B5, but not adjustable)
-- A9 original
-- P2 (SomaPulse, AllevaWave, ...)
-- Omni 8 (same as Omni 1, but not adjustable)
All 4 above also have an optional 5 minute rest period

Schumann Resonances:
-- Schumann 1 (7.83 pps)
-- Schumann 2 (7.83, 14.3 pps)
-- Schumann 3 (7.83, 14.3, 20.8 pps)
-- Schumann 4 (7.83, 14.3, 20.8, 27.3 pps)
-- Schumann 5 (7.83, 14.3, 20.8, 27.3, 33.8 pps)

Sub-threshold continuous TMS modes:
-- scTMS 10pps 30 minutes
-- scTMS 10pps 60 minutes

Constant Frequency (continuous):
-- 1 pps
-- 2 pps
-- 3 pps
-- 4 pps
-- 5 pps
-- 10 pps

CNS/cortex wave patterns:
-- alpha wave entrainment
-- beta1 wave (low range)
-- beta2 wave (mid range)
-- beta3 wave (high range)
-- delta wave
-- theta wave
-- mu wave
-- SMA wave
-- gamma wave
## Quick Comparison: Physical

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions</th>
<th>Mass</th>
<th>Portability</th>
<th>Wearability</th>
<th>Power Source</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A9</strong> and variants: Matrix Pulse, 5pps, ...</td>
<td>3.0” (77 mm) 2.2” (56 mm) 0.8” (21mm)</td>
<td>58 g</td>
<td>excellent</td>
<td>good</td>
<td>9V battery or wall adapter</td>
</tr>
<tr>
<td><strong>C5</strong></td>
<td>4.7” (119 mm) 3.1” (79 mm) 1.0” (25mm)</td>
<td>352 g</td>
<td>good</td>
<td>poor</td>
<td>USB (micro-B) or external battery pack</td>
</tr>
<tr>
<td><strong>B5</strong></td>
<td>4.7” (119 mm) 3.1” (79 mm) 1.0” (25mm)</td>
<td>352 g</td>
<td>good</td>
<td>poor</td>
<td>USB (micro-B) or external battery pack</td>
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</tbody>
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Models B5 and C5 are physically identical except for color and markings.
# Quick Comparison: Physical

<table>
<thead>
<tr>
<th>Model</th>
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<th>Portability</th>
<th>Wearability</th>
<th>Power Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1</td>
<td>2.4” (61 mm) 2.4” (62 mm) 0.6” (15mm)</td>
<td>52 g</td>
<td>ultra</td>
<td>excellent</td>
<td>DLI88 camcorder battery or USB mini-B</td>
</tr>
</tbody>
</table>

NOTE: the model M1 represents ~ 25% reduction in physical size and mass when compared to the model A9
### Quick Comparison: Functional

<table>
<thead>
<tr>
<th></th>
<th>Coil Outputs</th>
<th>Intensity Levels</th>
<th>I.C.E.S. Protocols</th>
<th>Adjustable Protocols</th>
<th>Possible Protocols</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A9</strong></td>
<td>single</td>
<td>4 max ~ 1600 kG/s</td>
<td>1 fixed</td>
<td>none</td>
<td>1</td>
</tr>
<tr>
<td><strong>C5</strong></td>
<td>four, independent</td>
<td>16 max ~ 1700 kG/s</td>
<td>27 fixed</td>
<td>none</td>
<td>27 (Pre-set)</td>
</tr>
<tr>
<td><strong>B5</strong></td>
<td>four, independent</td>
<td>16 max ~ 1700 kG/s</td>
<td>8 adjustable</td>
<td>7</td>
<td>About 20,000,000,000,000,000 (~2e14)</td>
</tr>
</tbody>
</table>

*and variants: Matrix Pulse, 5pps, ...*
<table>
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<tr>
<th></th>
<th>coil outputs</th>
<th>intensity levels</th>
<th>I.C.E.S. protocols</th>
<th>Adjustable protocols</th>
<th>Possible protocols</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M1</strong></td>
<td>single</td>
<td>15 max ~ 1700 kG/s</td>
<td>30 fixed</td>
<td>none</td>
<td>30 Pre-set</td>
</tr>
</tbody>
</table>
# Quick Comparison: Flexibility and Uses

<table>
<thead>
<tr>
<th>Model</th>
<th>Complexity</th>
<th>Intended Uses</th>
<th>Upgrades/Variants</th>
<th>Firmware Updates</th>
</tr>
</thead>
<tbody>
<tr>
<td>A9</td>
<td>simple</td>
<td>anyone</td>
<td>several minor fee</td>
<td>none</td>
</tr>
<tr>
<td></td>
<td>and variants: Matrix Pulse, 5pps, ...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C5</td>
<td>easy to learn</td>
<td>anyone clinicians casual self-hackers</td>
<td>none planned</td>
<td>none</td>
</tr>
<tr>
<td>B5</td>
<td>complex</td>
<td>scientists researchers clinicians serious self-hackers</td>
<td>none planned</td>
<td>very rare, requires return, no fee, requires shipping payment</td>
</tr>
<tr>
<td>complexity</td>
<td>intended uses</td>
<td>upgrades/variants</td>
<td>firmware updates</td>
<td></td>
</tr>
<tr>
<td>------------</td>
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<tr>
<td>easy to learn</td>
<td>anyone</td>
<td>none planned</td>
<td>none</td>
<td></td>
</tr>
</tbody>
</table>

Like the model C5, the model M1 includes all previous ICES protocols, as well as many new protocols and several fixed frequency options. All of the protocols currently in use in scientific testing worldwide using Micro-Pulse technology are included, so you can use your M1 according to the most recent scientific findings.
All Micro-Pulse DigiCeutical™ products use the same core I.C.E.S.™ technology. Choose the best one for you:

**A9**
and variants: Matrix Pulse, 5pps, ...

For an individual who has decided to use ICES-PEMF on a daily basis for their own health or other reasons, the best place to start is the Model A9, which has several variants. It’s best to start with the basic model A9 so you can be certain that Micro-Pulse technology works well for you. The A9 is small enough to slip into a pocket and uses a 9V battery, so you can carry it around and use it day or night. The A9 is much more portable than the C5 or B5.

**C5**

For experienced Micro-Pulse users, the model C5 is easy to use and offers several advanced features. It has four coil outputs, so you can use it on up to 4 areas at the same time, but it costs less than four A9 systems. It has more than 2 dozen pre-set protocols, so you can choose the right protocol for your application: orthopedic injury or chronic pain, acute injury, head injury, brain/nerve function, or others. The C5 is appropriate for advanced Micro-Pulse customers, clinicians, clinical researchers, and self-hackers.

**B5**

Designed for scientific research, the model B5 is a serious scientific instrument. The hardware is identical to the model C5, but the firmware is much more advanced, and is intended for scientific and clinical research, and only the most serious self-hackers. The B5 allows an additional level of control over each protocol, allowing minute-by-minute control over the ICES stimulation pattern and sequence. It is more difficult to use than the C5, but offers greater flexibility for the serious PEMF researcher.
All Micro-Pulse DigiCeutical™ products use the same core I.C.E.S.™ technology. Choose the best one for you:

**M1**

Our most portable system, 25% less mass and size than an A9, easily wearable in clothing or bandages, can be worn during the day or night. It has all the same ICES protocols as a model C5, plus variants. For use by anyone who wants ICES gen 6.0 technology with many available protocols in an ultra-slim package. Intended for use near the point of injury, so very short coils can be used.

The model M1 is designed to be the most ultra-portable, affordable, flexible and reliable system available anywhere. The model M1 will initially be made in small batches using 3-D modeling technology for the case (not injection molded), and may require 2 to 4 days of assembly and testing before shipment after receipt of order.