

Size:  
7.44 x 3.52 x 1.79 inches  
189.0 x 89.5 x 45.5 mm

**APPLICATIONS**

- Medical Touch Panel PC
- Patient Monitoring System
- Ultrasound Systems

**FEATURES**

- Class I
- RoHS Compliant
- Input to Output: 2MOPP
- Up to 88% High Efficiency
- IEC-320-C14 AC Inlet
- Active Power Factor Correction
- Free Air Convection Cooling
- Ultra-low Leakage Current < 0.1mA
- Up to 100 Watts Output Power
- Single, Dual, and Triple Outputs
- 90-260VAC Input Voltage Range
- Over Current and Over Voltage Protection
- ANSI/AAMI ES 60601-1: 2005 (UL/cUL 3rd Edition), EN 60601-1:2006 (TUV/T-mark 3rd Edition)
- Optional ON/OFF Switch
- Optional Output Connectors Available

**DESCRIPTION**

The DTMPU101 series of class I medical AC/DC desktop power supplies provides up to 100 Watts of continuous output power in a 7.44" x 3.52" x 1.79" package. This series consists of single, dual, and triple output models with a wide input voltage range of 90~260VAC. Some features include high efficiency up to 88%, 2MOPP insulation, ultra-low leakage current < 0.1mA, and over current and over voltage protection. All models meet FCC Part-18 class B and CISPR-11 EN55011 class B emission limits. This series also has ANSI/AAMI ES 60601-1: 2005 (UL/cUL 3rd edition) and EN 60601-1:2006 (TUV/T-mark 3rd edition) medical approvals. All models are RoHS compliant and have been 100% burn-in tested.

**MODEL SELECTION TABLE**

**SINGLE OUTPUT MODELS**

| Model Number | Input Voltage Range | Output Voltage <sup>(1)</sup> | Output Current  | Total Regulation | N.L. Power Consumption | Output Power |
|--------------|---------------------|-------------------------------|-----------------|------------------|------------------------|--------------|
| DTMPU101-102 | 90 ~ 260 VAC        | 5 ~ 6 VDC                     | 14.00 ~ 11.66 A | 5%               | 3W                     | 70W          |
| DTMPU101-103 | 90 ~ 260 VAC        | 6 ~ 8 VDC                     | 13.33 ~ 10.00 A | 5%               | 3W                     | 80W          |
| DTMPU101-104 | 90 ~ 260 VAC        | 8 ~ 11 VDC                    | 11.25 ~ 8.20 A  | 4%               | 3W                     | 90W          |
| DTMPU101-105 | 90 ~ 260 VAC        | 11 ~ 13 VDC                   | 8.33 ~ 7.70 A   | 3%               | 3W                     | 100W         |
| DTMPU101-106 | 90 ~ 260 VAC        | 13 ~ 16 VDC                   | 7.70 ~ 6.30 A   | 3%               | 3W                     | 100W         |
| DTMPU101-107 | 90 ~ 260 VAC        | 16 ~ 21 VDC                   | 6.30 ~ 4.80 A   | 3%               | 3W                     | 100W         |
| DTMPU101-108 | 90 ~ 260 VAC        | 21 ~ 27 VDC                   | 4.80 ~ 3.70 A   | 2%               | 3W                     | 100W         |
| DTMPU101-109 | 90 ~ 260 VAC        | 27 ~ 33 VDC                   | 3.70 ~ 3.00 A   | 2%               | 3W                     | 100W         |
| DTMPU101-110 | 90 ~ 260 VAC        | 33 ~ 40 VDC                   | 3.00 ~ 2.50 A   | 2%               | 3W                     | 100W         |

**DUAL OUTPUT MODELS**

| Model Number | Input Voltage Range | Output Voltage | Output Current |      | Max. Regulation | No Load Power Consumption | Output Power |
|--------------|---------------------|----------------|----------------|------|-----------------|---------------------------|--------------|
|              |                     |                | Min            | Max  |                 |                           |              |
| DTMPU101-200 | 90 ~ 260 VAC        | +3.3 VDC       | 1.0A           | 10A  | 7%              | 3W                        | 69W          |
|              |                     | +12.0 VDC      | 0.3A           | 3.0A | 5%              |                           |              |
| DTMPU101-201 | 90 ~ 260 VAC        | +5.0 VDC       | 1.0A           | 10A  | 5%              | 3W                        | 80W          |
|              |                     | +12.0 VDC      | 0.3A           | 3.0A | 5%              |                           |              |
| DTMPU101-202 | 90 ~ 260 VAC        | +5.0 VDC       | 1.0A           | 10A  | 5%              | 3W                        | 80W          |
|              |                     | +15.0 VDC      | 0.3A           | 3.0A | 6%              |                           |              |
| DTMPU101-203 | 90 ~ 260 VAC        | +5.0 VDC       | 1.0A           | 10A  | 5%              | 3W                        | 80W          |
|              |                     | +24.0 VDC      | 0.2A           | 2.0A | 7%              |                           |              |
| DTMPU101-204 | 90 ~ 260 VAC        | +3.3 VDC       | 1.0A           | 10A  | 7%              | 3W                        | 55W          |
|              |                     | +5.0 VDC       | 0.5A           | 5.0A | 5%              |                           |              |
| DTMPU101-209 | 90 ~ 260 VAC        | +12 VDC        | 0.7A           | 7.0A | 5%              | 3W                        | 80W          |
|              |                     | -12 VDC        | 0A             | 1.0A | 5%              |                           |              |
| DTMPU101-210 | 90 ~ 260 VAC        | +15 VDC        | 0.6A           | 6.0A | 5%              | 3W                        | 80W          |
|              |                     | -15 VDC        | 0A             | 1.0A | 5%              |                           |              |
| DTMPU101-212 | 90 ~ 260 VAC        | +24.0 VDC      | 0.3A           | 3.0A | 5%              | 4W                        | 80W          |
|              |                     | -24.0 VDC      | 0A             | 1.0A | 5%              |                           |              |
| DTMPU101-215 | 90 ~ 260 VAC        | +5.0 VDC       | 1.0A           | 10A  | 5%              | 3W                        | 74W          |
|              |                     | -24.0 VDC      | 0A             | 1.0A | 5%              |                           |              |

**MODEL SELECTION TABLE**
**TRIPLE OUTPUT MODELS**

| Model Number   | Input Voltage Range | Output Voltage | Output Current |      | Max. Regulation | No Load Power Consumption | Output Power |
|----------------|---------------------|----------------|----------------|------|-----------------|---------------------------|--------------|
|                |                     |                | Min            | Max  |                 |                           |              |
| DTMPU101-300   | 90 ~ 260 VAC        | +3.3 VDC       | 1.0A           | 10A  | 7%              | 3W                        | 74W          |
|                |                     | +12 VDC        | 0.3A           | 3.0A | 5%              |                           |              |
|                |                     | -12 VDC        | 0A             | 1.0A | 5%              |                           |              |
| DTMPU101-300-1 | 90 ~ 260 VAC        | +3.3 VDC       | 1.0A           | 10A  | 7%              | 3W                        | 74W          |
|                |                     | +12 VDC        | 0.3A           | 3.0A | 5%              |                           |              |
|                |                     | +12 VDC        | 0A             | 1.0A | 5%              |                           |              |
| DTMPU101-301   | 90 ~ 260 VAC        | +5 VDC         | 1.0A           | 10A  | 5%              | 4W                        | 80W          |
|                |                     | +12 VDC        | 0.3A           | 3.0A | 5%              |                           |              |
|                |                     | -5 VDC         | 0A             | 1.0A | 5%              |                           |              |
| DTMPU101-301-1 | 90 ~ 260 VAC        | +5 VDC         | 1.0A           | 10A  | 5%              | 4W                        | 80W          |
|                |                     | +12 VDC        | 0.3A           | 3.0A | 5%              |                           |              |
|                |                     | +5 VDC         | 0A             | 1.0A | 5%              |                           |              |
| DTMPU101-302   | 90 ~ 260 VAC        | +5 VDC         | 1.0A           | 10A  | 5%              | 4W                        | 80W          |
|                |                     | +12 VDC        | 0.3A           | 3.0A | 5%              |                           |              |
|                |                     | -12 VDC        | 0A             | 1.0A | 5%              |                           |              |
| DTMPU101-302-1 | 90 ~ 260 VAC        | +5 VDC         | 1.0A           | 10A  | 5%              | 4W                        | 80W          |
|                |                     | +12 VDC        | 0.3A           | 3.0A | 5%              |                           |              |
|                |                     | +12 VDC        | 0A             | 1.0A | 5%              |                           |              |
| DTMPU101-303   | 90 ~ 260 VAC        | +5 VDC         | 1.0A           | 10A  | 5%              | 4W                        | 80W          |
|                |                     | +15 VDC        | 0.3A           | 3.0A | 6%              |                           |              |
|                |                     | -15 VDC        | 0A             | 1.0A | 5%              |                           |              |
| DTMPU101-303-1 | 90 ~ 260 VAC        | +5 VDC         | 1.0A           | 10A  | 5%              | 4W                        | 80W          |
|                |                     | +15 VDC        | 0.3A           | 3.0A | 6%              |                           |              |
|                |                     | +15 VDC        | 0A             | 1.0A | 5%              |                           |              |
| DTMPU101-304   | 90 ~ 260 VAC        | +5 VDC         | 1.0A           | 10A  | 5%              | 3W                        | 80W          |
|                |                     | +24 VDC        | 0.3A           | 3.0A | 5%              |                           |              |
|                |                     | -24 VDC        | 0A             | 1.0A | 5%              |                           |              |
| DTMPU101-304-1 | 90 ~ 260 VAC        | +5 VDC         | 1.0A           | 10A  | 5%              | 3W                        | 80W          |
|                |                     | +24 VDC        | 0.3A           | 3.0A | 5%              |                           |              |
|                |                     | +24 VDC        | 0A             | 1.0A | 5%              |                           |              |
| DTMPU101-305   | 90 ~ 260 VAC        | +5 VDC         | 1.0A           | 10A  | 5%              | 4W                        | 80W          |
|                |                     | +24 VDC        | 0.3A           | 3.0A | 5%              |                           |              |
|                |                     | -12 VDC        | 0A             | 1.0A | 5%              |                           |              |
| DTMPU101-305-1 | 90 ~ 260 VAC        | +5 VDC         | 1.0A           | 10A  | 5%              | 4W                        | 80W          |
|                |                     | +24 VDC        | 0.3A           | 3.0A | 5%              |                           |              |
|                |                     | +12 VDC        | 0A             | 1.0A | 5%              |                           |              |
| DTMPU101-306   | 90 ~ 260 VAC        | +3.3 VDC       | 1.0A           | 10A  | 7%              | 3W                        | 74W          |
|                |                     | +12 VDC        | 0.3A           | 3.0A | 5%              |                           |              |
|                |                     | -5 VDC         | 0A             | 1.0A | 5%              |                           |              |
| DTMPU101-306-1 | 90 ~ 260 VAC        | +3.3 VDC       | 1.0A           | 10A  | 7%              | 3W                        | 74W          |
|                |                     | +12 VDC        | 0.3A           | 3.0A | 5%              |                           |              |
|                |                     | +5 VDC         | 0A             | 1.0A | 5%              |                           |              |
| DTMPU101-308   | 90 ~ 260 VAC        | +3.3 VDC       | 1.0A           | 10A  | 7%              | 3W                        | 60W          |
|                |                     | +5 VDC         | 0.3A           | 3.0A | 5%              |                           |              |
|                |                     | -12 VDC        | 0A             | 1.0A | 5%              |                           |              |
| DTMPU101-308-1 | 90 ~ 260 VAC        | +3.3 VDC       | 1.0A           | 10A  | 7%              | 3W                        | 60W          |
|                |                     | +5 VDC         | 0.3A           | 3.0A | 5%              |                           |              |
|                |                     | +12 VDC        | 0A             | 1.0A | 5%              |                           |              |

**NOTES**

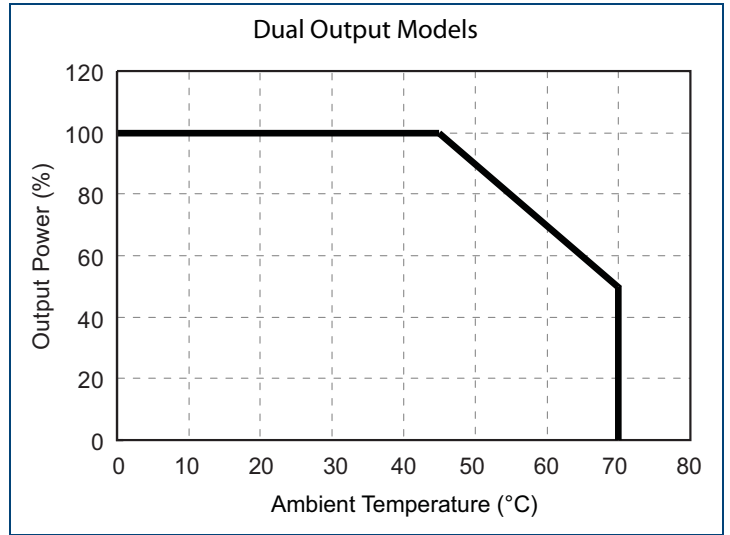
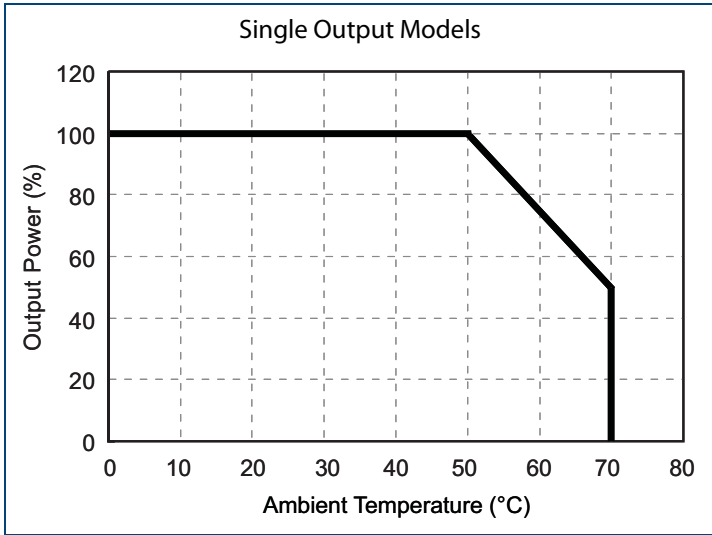
1. For single output models the output voltage is specified as a range (ex: 33~40VDC); the customer must specify what they would like the output voltage set at.
2. Optional ON/OFF switch is available for this series. Please call factory for ordering details.
3. Optional output connectors available. Please call factory for ordering details.

**SPECIFICATIONS: DTMPU101 SERIES**

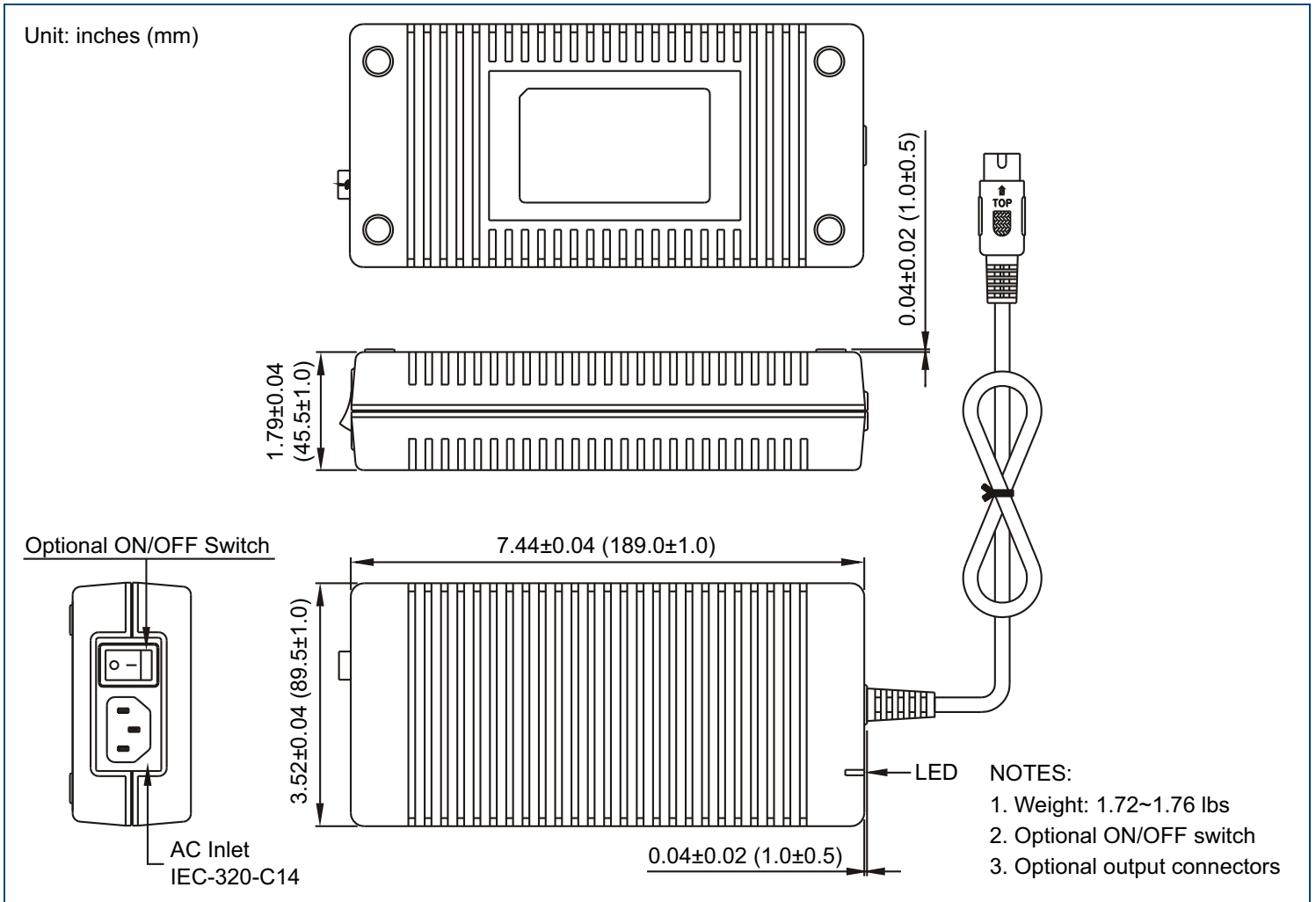
All specifications are based on 25°C, Nominal Input Voltage, and Maximum Output Current unless otherwise noted.  
 We reserve the right to change specifications based on technological advances.

| SPECIFICATION                       | TEST CONDITIONS  |  | Min  | Typ  | Max   | Unit  |
|-------------------------------------|--|--|--|------|-------|-------|
| <b>INPUT SPECIFICATIONS</b>         |  |  |  |      |       |       |
| Input Voltage                       | Safety Approvals Input Voltage Range   |  | 100  |      | 240   | VAC   |
|                                     | Operating Input Voltage Range  |  | 90   |      | 260   |       |
| Input Frequency                     |  |  | 47   |      | 63    | Hz    |
| Input Current                       | 100VAC, full load  |  |  | 1.25 |       | A     |
|                                     | 240VAC, full load  |  |  | 0.5  |       |       |
| Inrush Current                      | 115VAC, full load, 25°C, cold start  |  |  |      | 50    | A     |
|                                     | 230VAC, full load, 25°C, cold start  |  |  |      | 100   |       |
| No Load Power Consumption           | 230VAC, no load  |  | See Table  |      |       |       |
| Power Factor Correction             | 230VAC, full load  |  | 0.95   |      | 1     |       |
| <b>OUTPUT SPECIFICATIONS</b>        |  |  |  |      |       |       |
| Output Voltage                      |  |  | See Table  |      |       |       |
| Line Regulation                     | LL to HL, full load  |  | 0.5  |      | 1     | %     |
| Load Regulation                     | 230VAC   |  | 3  |      | 7     | %     |
| Output Power                        |  |  | See Table  |      |       |       |
| Output Current                      |  |  | See Table  |      |       |       |
| Ripple & Noise (peak to peak)       | 90VAC, full load   |  |  |      | 2     | %     |
|                                     | Outputs under 3.3VDC<br>Others   |  |  |      | 1     |       |
| Hold-up Time                        | 110VAC, full load  |  | 16   |      |       | ms    |
| Start-up Time                       | 100VAC, full load  |  | 0.3  |      | 2     | s     |
| Transient Response Time             | 100VAC, Full load to half load   |  |  |      | 4     | ms    |
| Temperature Coefficient             |  |  | -0.04  |      | +0.04 | %/°C  |
| <b>PROTECTION</b>                   |  |  |  |      |       |       |
| Over Voltage Protection             |  |  | 112  |      | 132   | %     |
| Over Current Protection             |  |  | 110  |      | 150   | %     |
| <b>GENERAL SPECIFICATIONS</b>       |  |  |  |      |       |       |
| Efficiency                          | 230 VAC, full load   |  | 75   |      | 88    | %     |
| Dielectric Withstanding Voltage     | Primary to Secondary (2MOPP Insulation)  |  | 6932   |      |       | VDC   |
|                                     | Primary to PE  |  | 2121   |      |       |       |
| Isolation Resistance                | Test Voltage = 500VDC  |  | 50   |      |       | MΩ    |
| Leakage Current                     | 240VAC/60Hz  |  |  |      | 0.1   | mA    |
| <b>ENVIRONMENTAL SPECIFICATIONS</b> |  |  |  |      |       |       |
| Operating Temperature               | Single   | Derating linearly from 100% Load at 50°C to 50% load at 70°C | 0  |      | +70   | °C    |
|                                     | Dual & Triple  | Derating linearly from 100% Load at 45°C to 50% load at 70°C | 0  |      | +70   |       |
| Storage Temperature                 |  |  | -40  |      | +85   | °C    |
| Operating Humidity                  |  |  | 0  |      | 95    | %     |
| Storage Humidity                    |  |  | 0  |      | 95    | %     |
| Operating Altitude                  |  |  | Up to 3000m  |      |       |       |
| Cooling                             |  |  | Free air convection                                |      |       |       |
| MTBF                                | MIL-HDBK-217F, 25°C  |  | 100,000  |      |       | hours |
| <b>PHYSICAL SPECIFICATIONS</b>      |  |  |  |      |       |       |
| Weight                              |  |  | 1.72~1.76 lbs (778~800g)                           |      |       |       |
| Dimensions (L x W x H)              |  |  | 7.44 x 3.52 x 1.79 inches (189.0 x 89.5 x 45.5 mm) |      |       |       |
| <b>SAFETY &amp; EMC</b>             |  |  |  |      |       |       |
| Safety Approvals                    | ANSI/AAMI ES 60601-1: 2005 (UL/cUL 3rd edition); EN 60601-1:2006 (TUV/T-mark 3rd edition); CE, CB, FCC |  |  |      |       |       |
| EMI Requirements for CISPR-11       | 220VAC   |  | B  |      |       | Class |
| EMI Requirements for FCC PART-18    | 110VAC   |  | B  |      |       | Class |

DERATING CURVES



MECHANICAL DRAWING



## COMPANY INFORMATION

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Wall Industries, Inc. has created custom and modified units for over 50 years. Our in-house research and development engineers will provide a solution that exceeds your performance requirements on-time and on budget. Our ISO9001-2008 certification is just one example of our commitment to producing a high quality, well-documented product for our customers.

Our past projects demonstrate our commitment to you, our customer. Wall Industries, Inc. has a reputation for working closely with its customers to ensure each solution meets or exceeds form, fit and function requirements. We will continue to provide ongoing support for your project above and beyond the design and production phases. Give us a call today to discuss your future projects.

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