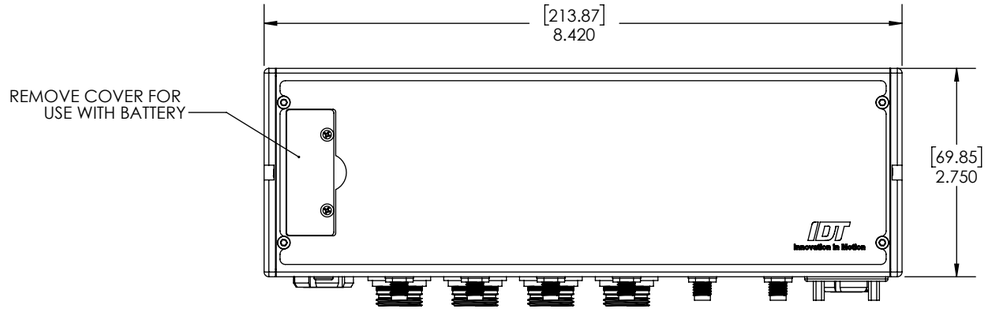
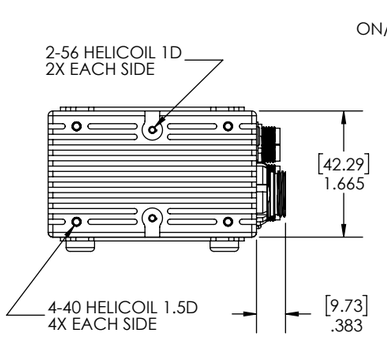
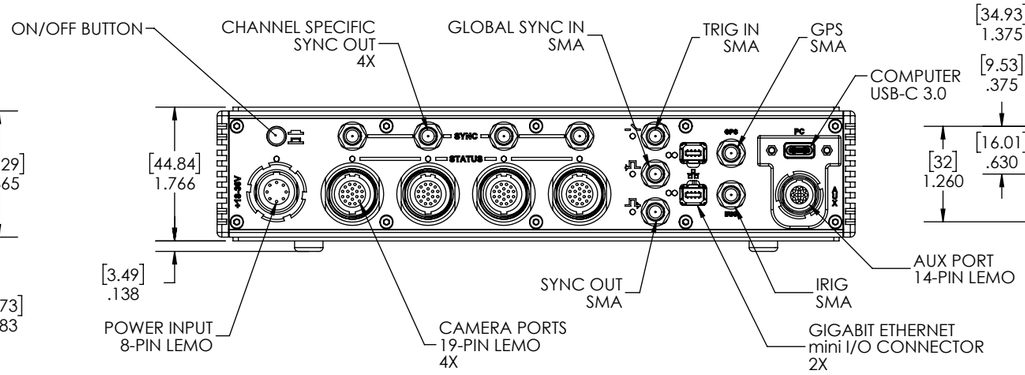
# INTERFACE CONTROL DOCUMENT

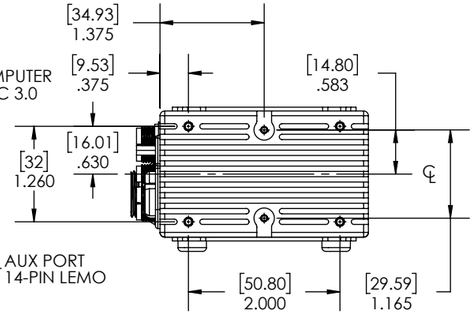
1. SEE USERS MANUAL FOR DETAILED INSTRUCTIONS.
2. INSTALL HIGH-G BRACKETS OVER IDT BATTERY CLAMPS.

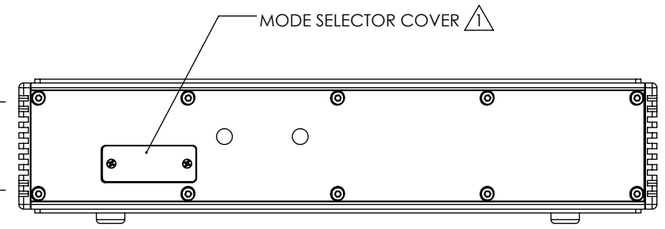
| REVISIONS | | | | | |
|---|---|---|---|---|---|
| ZONE | REV. | ECO # | DESCRIPTION | DATE | APPROVED |
| | A | ECO-0085 | INITIAL RELEASE FOR PRODUCTION. | 6/26/2017 | B. MOAK |
| | B | ECO-0123 | ADDED VIEW ON SHEET TWO WITH BATTERY CONNECTED | 8/2/2017 | B. MOAK |
| | C | ECO-0473 | REVISED OVERALL DOCUMENT. ADDED VIEWS FOR HIGH-G BRACKET OPTION. ADDED PINOUTS FOR LEMO CONNECTORS. | 6/12/2019 | C. VIDAMO |

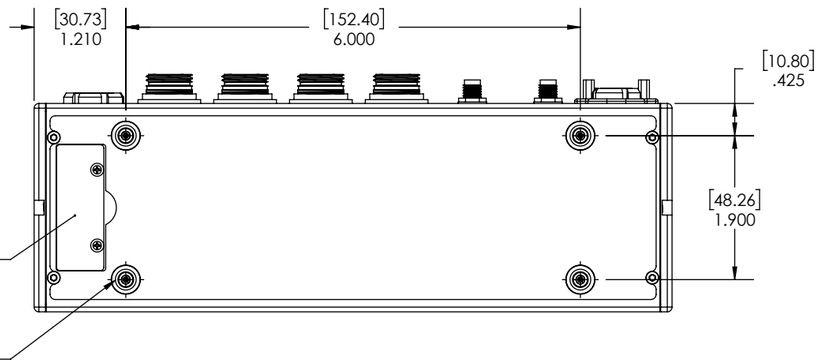


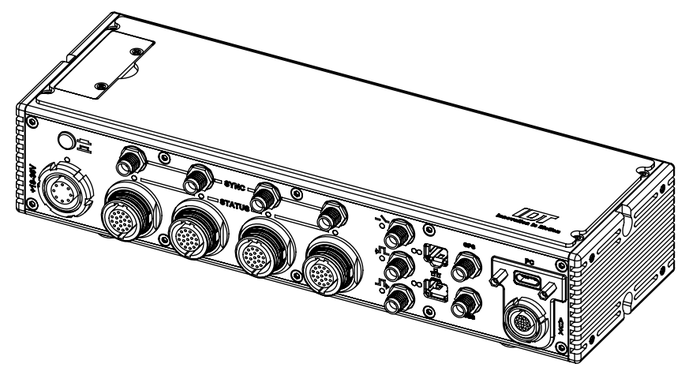






UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES
TOLERANCES ON:
FRACTIONAL DECIMAL ANGULAR
± 1/16 .X ± .03 ± 1°
.XX ± .01
.XXX ± .005

**DO NOT SCALE DRAWING**

THIRD ANGLE PROJECTION

PROJECT NAME: TC19 HUB

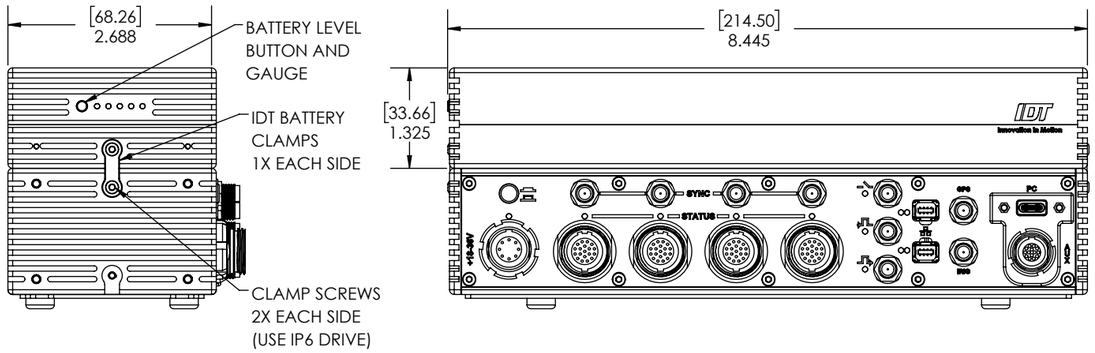
DRAWN: C. VIDAMO 06/12/2019
CHECKED: B. MOAK 06/12/2019
MECH. ENGINEER: B. MOAK 06/12/2019
ELECTRICAL ENGINEER:
OPERATION MANAGER:
PROGRAM MANAGER:

**INTEGRATED DESIGN TOOLS, INC**
1 WEST MOUNTAIN STREET SUITE 3
PASADENA, CA 91103

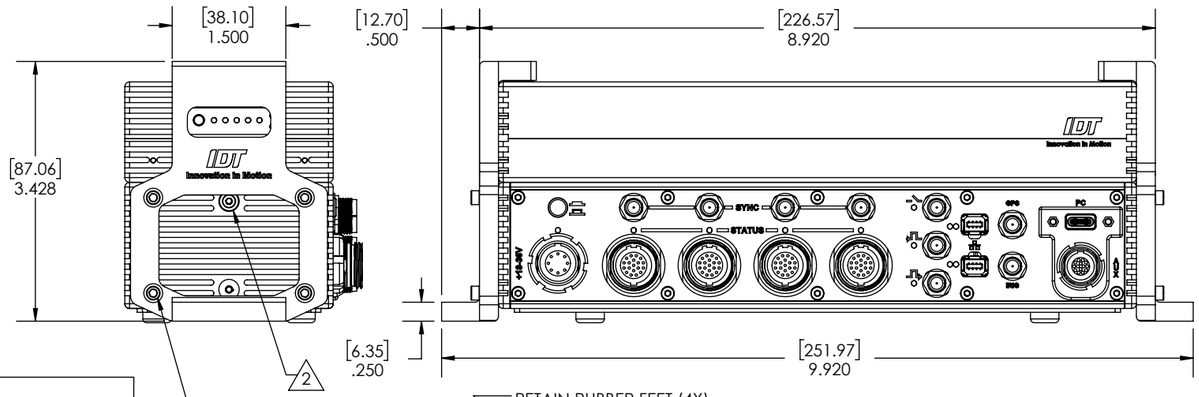
TITLE: TC19 HUB, INTERFACE CONTROL DOCUMENT (ICD)

SIZE: B | DWG. NO. 1447-0100 | REV C
SCALE: 1:2 | DATE: 6/13/2019 | SHEET 1 OF 2

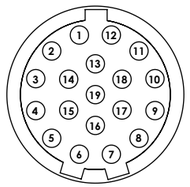
## WITH SINGLE BATTERY CONNECTED



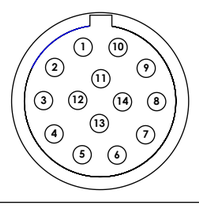

## WITH SINGLE BATTERY CONNECTED AND HIGH-G BRACKETS



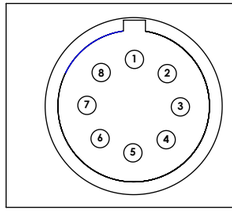

## FOR CONNECTOR ELECTRICAL SPECIFICATION REFERENCE ONLY



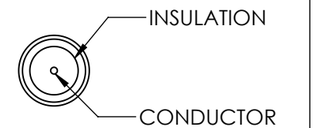

| LEMO CONNECTOR M-SERIES HEN.2M.319.XNLP | | |
|---|---|---|
| **PIN** | **SIGNAL** | **TECHNICAL DESCRIPTION** |
| 1 | SGND | GROUND , DRAIN |
| 2 | READY OUT | TTL 5V, 10mA MAX |
| 3 | SYNC OUT | TTL 5V, 10mA MAX |
| 4 | MCT 0 / ETH 1 | 100 Ω ± 15% , GIGABIT ETHERNET (1000BaseT) |
| 5 | MCT 1 / ETH 2 | 100 Ω ± 15% , GIGABIT ETHERNET (1000BaseT) |
| 6 | MCT 3 / ETH 6 | 100 Ω ± 15% , GIGABIT ETHERNET (1000BaseT) |
| 7 | MCT 5 / ETH 5 | 100 Ω ± 15% , GIGABIT ETHERNET (1000BaseT) |
| 8 | MCT 6 / ETH 7 | 100 Ω ± 15% , GIGABIT ETHERNET (1000BaseT) |
| 9 | MCT 7 / ETH 8 | 100 Ω ± 15% , GIGABIT ETHERNET (1000BaseT) |
| 10 | GND | GROUND FOR POWER RETURN AND SYNC OUT RETURN |
| 11 | NOT CONNECTED | - |
| 12 | + CAM POWER | 18VDC TO 36VDC , 1.7A @ 24VDC (NOMINAL) |
| 13 | NOT CONNECTED | - |
| 14 | TRIG IN | 2.7 kΩ ± 10% SWITCH CLOSURE (TTL) 5V AND CMOS LEVEL COMPATIBLE |
| 15 | MCT 2 / ETH 3 | 100 Ω ± 15% , GIGABIT ETHERNET (1000BaseT) |
| 16 | MCT4 / ETH 4 | 100 Ω ± 15% , GIGABIT ETHERNET (1000BaseT) |
| 17 | GND | GROUND FOR POWER RETURN AND SYNC OUT RETURN |
| 18 | NOT CONNECTED | - |
| 19 | SYNC IN | 2.7 kΩ ± 10% SWITCH CLOSURE (TTL) 5V AND CMOS LEVEL COMPATIBLE |




| LEMO CONNECTOR B-SERIES ECG.1B.314.CLV | |
|---|---|
| **PIN** | **SIGNAL** |
| 1 | TRIG IN DIFF + |
| 2 | TRIG IN DIFF - |
| 3 | ISOLATED GND |
| 4 | ISOLATED GND |
| 5 | SYNC IN DIFF + |
| 6 | SYNC IN DIFF - |
| 7 | SYNC OUT DIFF + |
| 8 | SYNC OUT DIFF - |
| 9 | GND |
| 10 | READY OUT |
| 11 | +7.5 VDC |
| 12 | +7.5 VDC |
| 13 | GND |
| 14 | GND |




| LEMO CONNECTOR B-SERIES ECG.2B.308.CLV | |
|---|---|
| **PIN** | **SIGNAL** |
| 1 | POWER INPUT +VDC |
| 2 | |
| 3 | |
| 4 | |
| 5 | POWER GROUND |
| 6 | |
| 7 | |
| 8 | |

| **FEMALE SMA** JACK CONNECTOR | |
|---|---|
|   | |
| **IMPEDANCE** | 50 ± 3 Ohms |



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FRACTIONAL ± 1/16 DECIMAL .X ± .03 .XX ± .01 .XXX ± .005 ANGULAR ± 1°

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SCALE: 1:2 | DATE: 6/13/2019 | SHEET 2 OF 2