TDAS G5
Docking Station
User's Manual

March 2017

11000-00050-MAN (Rev. 3)

Table of Contents

DTS Support **4**
Sensor Interface **6**
Input Range 6
Excitation Sources 6
Control Panel **7**
Using the POWER Input 7
Using the POWER Switch 8
Using the COM Connectors 8
Using the Event Input *9*
Using the DIGITAL INPUT 9
ON LED Indicator 10
Basic Care and Handling **11**
Shock Rating 11
Mounting Considerations *11*
Thermal Considerations 12
Power Management **13**
Power Consumption 13
Internal Battery 13
Power-up and Power-down Procedures 14
Communication Features **15**
Communication Method 15
Using Multiple TDAS G5 Docking Stations *15*
Auxiliary Signals 15
Start Record Input *15*
Status Output Signal *16*
Appendix A: Control Panel Connector Information **17**
Suggested Connector Sources 18
Appendix B: Sensor Connector Pin Assignments **19**
Appendix C: Mechanical Specifications **26**

Accessories/Support Equipment 27

DTS Support

TDAS systems are designed to be reliable and simple to operate. Should you need assistance, DTS has support engineers worldwide with extensive product knowledge and crash test experience to help via telephone, e-mail or on-site visits.

The best way to contact a DTS support engineer is to submit a request through the DTS Help Center web portal (support.dtsweb.com). You must be registered (support.dtsweb.com/registration) to submit a request (https://support.dtsweb.com/hc/en-us/requests/new). Registration also enables access to additional self-help resources and non-public support information.

This manual supports the following products:

- 11000-00050: TDAS G5 VDS (Vehicle Docking Station), no SCP
- 11000-00051: TDAS G5 VDS (Vehicle Docking Station), DTS std SCP
- 11000-00052: TDAS G5 VDS (Vehicle Docking Station), Option A SCP
- 11000-00053: TDAS G5 VDS (Vehicle Docking Station), Option D SCP
- 11000-00054: TDAS G5 VDS (Vehicle Docking Station), Option G SCP
- 11000-00055: TDAS G5 VDS (Vehicle Docking Station), Option H SCP
- 11000-00056: TDAS G5 VDS (Vehicle Docking Station), Option 24 SCP
- 11000-00057: TDAS G5 VDS (Vehicle Docking Station), Option E SCP
- 11000-00058: TDAS G5 VDS (Vehicle Docking Station), Option E3 SCP
- 11000-00059: TDAS G5 VDS (Vehicle Docking Station), Option 21 SCPs
- 11000-00170: TDAS G5 VDS (Vehicle Docking Station), Option 27 SCP
- 11000-00171: TDAS G5 VDS (Vehicle Docking Station), Option M SCP
- 11000-00172: TDAS G5 VDS (Vehicle Docking Station), Option 18 SCP
- 11000-00173: TDAS G5 VDS (Vehicle Docking Station), Option 41 SCP

Introducing the TDAS G5 Docking Station

The TDAS G5 Docking Station allows for easy installation of a TDAS G5 Data Acquisition System (DAS) into a rugged enclosure for on-board testing applications. Power, communication and event signals are easily accessible via the control panel. Sensors are easily connected via an interchangeable sensor connector panel available in a variety of user-specified connectors and pin assignments. Docking stations may be interconnected in a chain to create higher channel-count systems; they may also be interconnected with TDAS PRO and SLICE PRO systems.

- Shock hardened to 100 g for dynamic testing environments.
- 32 sensor input channels supporting 2 V and 5 V excitation sources.
- 16 isolated and protected digital inputs.
- Contact-closure event input with 1000 V isolation.
- Ethernet 10/100BaseT/Tx supports daisy-chaining with TDAS and SLICE PRO equipment via the COM connectors.
- Internal battery with 1 hour capacity functions as primary or back-up power.
- "Smart Charge" circuit helps to ensure the battery receives the proper charge.
- Rugged, time constant, momentary power switch prevents inadvertent turn off.
- LED indicator for power and battery status.
- Primary system input power is protected against reverse current, over-current, and transient over-voltage conditions.
- Integral threaded mounting holes.

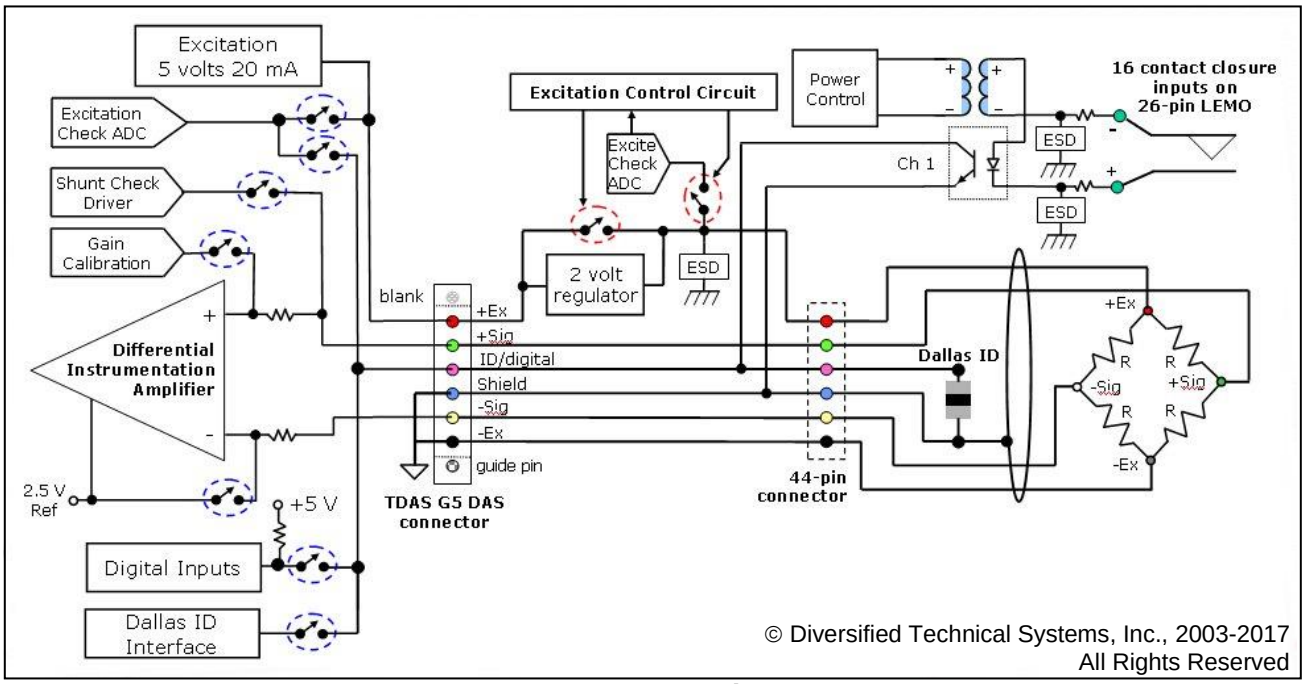
Connector information and pin assignments can be found in Appendices A and B. Mechanical specifications are included in Appendix C. Please see your packing list for your hardware's specifications.

TDAS G5 Docking Stations showing 1B LEMO and Tajimi Sensor Connector Panel Options

Sensor Interface

The TDAS G5 Docking Station is available with LEMO 1B, 2B or Tajimi sensor input connectors. Thirty-two (32) sensor input channels are available via the sensor connector panel and interface with the TDAS G5 DAS installed in the docking station. For detailed information on TDAS G5 DAS operation, please see the TDAS G5 DAS User's Manual.

All docking stations have sensor connections as shown below. See Appendix B for sensor connector pin assignments.



Sensor Connections

Input Range

The nominal sensor input range is ±2.5 V (differential) at a gain of 1. The rated common-mode voltage range is 0.3 to 4.7 V.

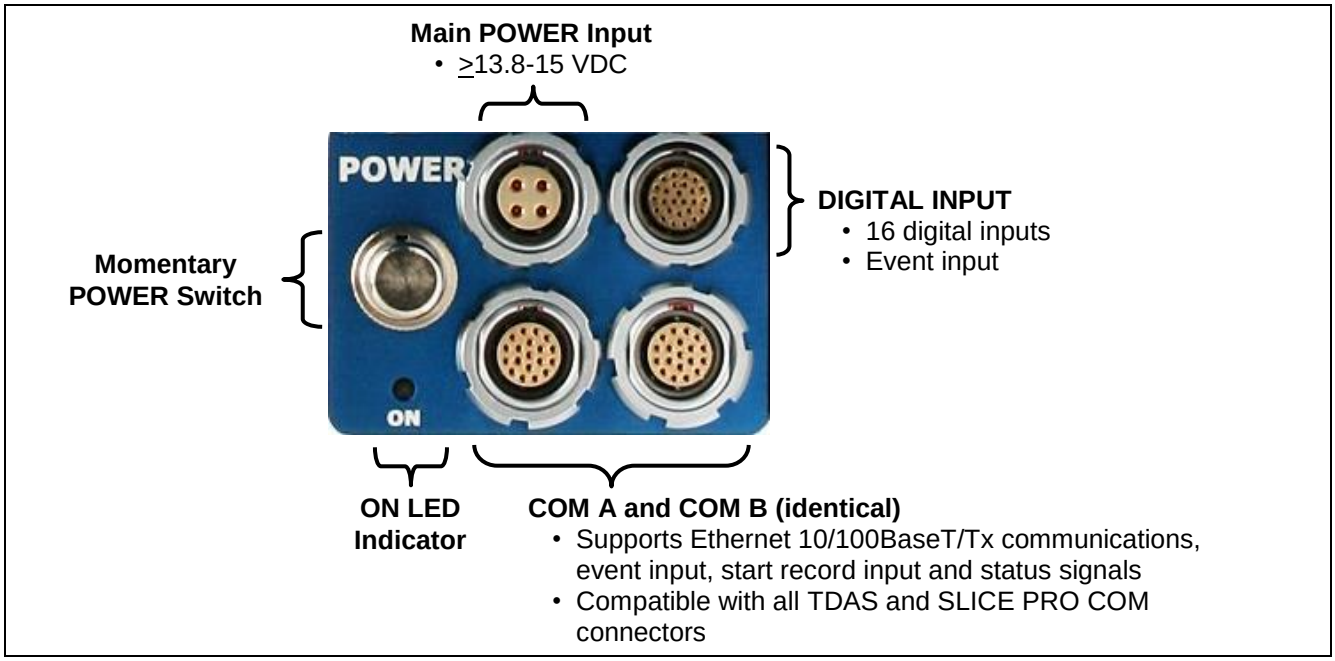
Excitation Sources

Standard excitation voltages are 2 V, 5 V, or off. Excitation sources for each channel are individually regulated and current limited (20 mA per channel). Recovery time is <1 ms.

Excitation sources are not turned on until the software initializes the system during the *Real-Time* or *Collect Data* modes.

Control Panel

The 19-pin COM connectors are functionally identical and allow access to all communication features and signal lines. The POWER connector supports primary system input power and the momentary power switch will power up or power down the system. DIGITAL INPUTs are available via the dedicated LEMO connector. See Appendix A for connector information and pin assignments.



TDAS G5 Docking Station Control Panel

Using the POWER Input

External power is provided via the 4-pin POWER connector and is used to 1) charge the internal battery when system power is off, or 2) simultaneously charge and run a docking station when system power is on. If input power fails, the docking station will transition to its internal battery. (When fully charged, battery capacity is sufficient to provide primary power and sustain full operation for 1 hour.)

Input Voltage, System OFF/ON	Input Current, System OFF*	Input Current, System ON**
>13.8-15 VDC; 15 VDC nominal	9 W; 600 mA	21 W; 1.4 A

* charging internal battery

** fully armed + charging internal battery

Using the POWER Switch

A momentary, push-button switch is used for on/off control. To start or stop the system, firmly press and hold the switch for 3-4 seconds until the LED changes status, then release. Total time from ON initiation to system ready is ~20 seconds. Multiple units in a chain may be started in any order. When all units are ready, you can start the software. Be sure to follow proper procedures to avoid an unstable condition.

Using the COM Connectors

Ethernet 10/100BaseT/Tx communications, event input, start record input, and status signals are supported via the COM connectors. These connectors are functionally identical and are compatible with all TDAS COM and SLICE PRO connectors.

Communications are support via an Ethernet REC cable (P/N 10700-0015x) using either COM port. TDAS G5, TDAS PRO and SLICE PRO equipment can be daisy-chained via the COM connector using an RDC cable (P/N 10700-0014x) and following the interconnect protocol:

1. The Ethernet cable (P/N 10700-0015x) is connected to the first unit using either COM port.
2. The RDC cable (**M**ASTER) is connected to the first unit using the open COM port.
3. The RDC cable (**S**LAVE) from step 2 is connected to the second unit using either COM port.

Steps 2 and 3 are repeated for additional units. Each unit in the middle of the chain must contain one MASTER and one SLAVE connection. Up to 7 TDAS G5, TDAS PRO or SLICE PRO systems can be connected in this manner.

Using the Event Input

An isolated, ESD-protected, contact-closure EVENT input is available through the 19-pin COM connectors and the 26-pin DIGITAL INPUT connector. This input provides a way to use a contact-closure switch in harsh or noisy environments without negatively affecting the data acquisition system. (The event input is functionally identical whether using COM A, COM B, or the DIGITAL INPUT connector.) A software trigger can also be used—please see your software manual for information on how to set a software level trigger.

The EVENT input may be used in either of two ways.

- In Circular Buffer mode, this input triggers data collection and marks zero time (T=0).
- In Recorder mode, this input is used to mark T=0 only.

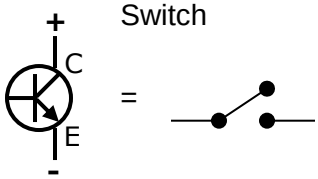
Simple Contact Closure 	Self-powered with a current conducting capability of at least 5 mA No polarity requirement 1000 V isolation

WARNING:

Do not apply external voltages to the event input—this could result in damage to the unit.

Using the DIGITAL INPUT

Sixteen (16) isolated, protected, and self-powered, contact-closure digital inputs and an event input are available via the 26-pin LEMO connector. (The event input is functionally identical whether using COM A, COM B, or the DIGITAL INPUT connector.) Use of the event input is discussed above.

Simple Contact Closure 	Self powered with a current conducting capability of at least 5 mA No polarity requirement
External Semiconductor Switch 	Self powered with a current conducting capability of at least 5 mA Proper polarity must be observed <2000 Ω = CLOSED = ON = logic 1 >5000 Ω = OPEN = OFF = logic 0

ON LED Indicator

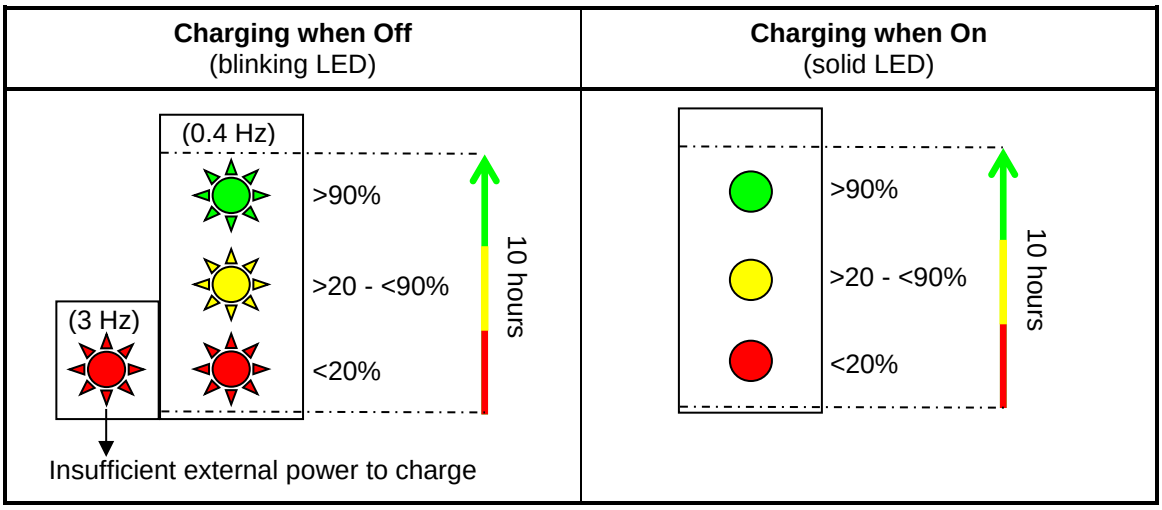
The TDAS G5 Docking Station has one LED (red/yellow/green) that provides ongoing battery status in three ways:

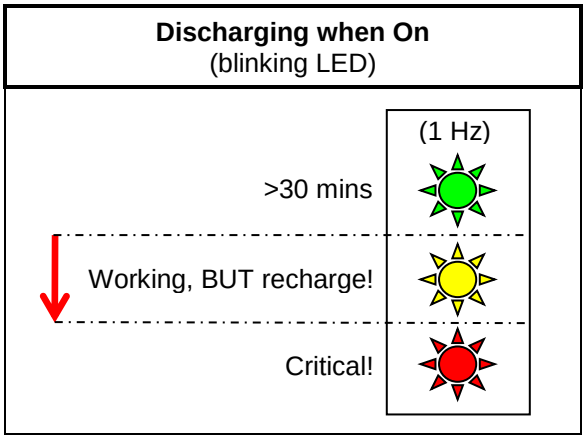
1) Charging when the docking station is off (blinking LED);
2) Charging when the docking station is on (solid LED);
3) Discharging when the docking station is on (blinking LED).

When discharging (i.e., drawing power from the internal battery), battery status is determined dynamically during use. Please pay close attention to the LED as it will indicate if the battery status is acceptable (green), low (yellow) or at a critical level (red).

WARNING:

Do not perform any critical tests when the LED indicator is yellow (battery low) or red (battery critical).





Basic Care and Handling

TDAS G5 Docking Stations are precision devices designed to operate reliably in dynamic testing environments. Though resistant to many environmental conditions, care should be taken not to subject the unit to harsh chemicals, submerge it in water, or drop it onto any hard surface.

WARNING:

Electronic equipment dropped from desk height onto a solid floor may experience up to 10,000 g. Under these conditions, damage to the exterior and/or interior of the unit is likely.

If a TDAS G5 DAS is not installed in the docking station, we strongly recommend reattaching the clear plastic cap to cover the opening and protect the connector interface on the docking station. If you feel the interface connector on your docking station has become contaminated, please contact DTS support before attempting any cleaning procedure.

WARNING:

The 216-position, gold-plated, interface connector on the docking station and DAS should be treated with great care. It is through this interface that all signals enter and exit the DAS. Any debris, solvents, or oil (even from fingers) can compromise the integrity of the connections/signals.

The TDAS G5 Docking Station is supplied with calibration data from the factory. DTS recommends annual recalibration to ensure that the unit is performing within factory specifications. The TDAS G5 Docking Station is not user-serviceable and should be returned to the factory for service or repair.

When not in use or if shipping is required, we suggest that you always place the unit in the padded carrying case originally provided with your system.

Shock Rating

The TDAS G5 Docking Station is rated for 100 g, 12 ms half-sine duration, in all axes.

Mounting Considerations

Crashworthy TDAS equipment should be bolted securely to the test vehicle or dynamic testing device to provide the best shock protection. Mounting methods and hardware selection should be carefully calculated to withstand expected shock loading and facilitate proper grounding. Check bolt tightness periodically to ensure that 1) the unit is securely

fastened to the baseplate, and 2) the baseplate is securely fastened to the testing platform. (See Appendix C for the unit's mechanical specifications.)

DTS strongly recommends that all equipment be properly grounded to minimize any risk of data noise due to high-current transients. The test vehicle or dynamic testing device should be connected to earth ground. Crashworthy TDAS equipment should be grounded to each other and bolted to the test vehicle. DTS recommends checking continuity between the enclosures of each unit to confirm resistance readings of <1 ohm.

Thermal Considerations

TDAS G5 systems use extensive power management to minimize heat generation. Since the system draws the most power when armed, running the calibrations and arming as late as possible will minimize self-heating.

It is extremely unlikely that excessive heat will ever be an issue in real-world testing applications using TDAS G5 systems. However, if high ambient temperatures, exposure to other heat sources, or severely restricted airflow will cause case temperatures in excess of 50°C (too hot to touch comfortably), the airflow created by a small fan will increase heat transfer by a factor of 3 to 5. Additionally, always shield the units from exposure to direct sunlight.

Power Management

A good power source is of paramount importance. Each TDAS G5 Docking Station should be powered from a high-quality 15 V power supply with a current rating of at least 2 A (this would include the TDAS PLUS Distributor and TDAS PLUS Mini Distributor). Be sure to consider any power drop due to cable length. Always remember:

- To ensure the internal battery is fully charged, the minimum input voltage received by the docking station at its power input connector must be ≥13.8 V.
- DTS always recommends using an external power source during set-up and check-out. This will ensure that the internal battery is always fully charged.

Input Voltage, System OFF/ON	Input Current, System OFF*	Input Current, System ON**
≥13.8-15 VDC; 15 VDC nominal	9 W; 600 mA	21 W; 1.4 A

* charging internal battery

** fully armed + charging internal battery

Power Consumption

Power off: When connected to sufficient external power, the docking station will draw up to 600 mA for charging the internal battery.

Power on: When a TDAS G5 system (docking station and DAS) is initially powered, all sensor excitation sources, signal conditioning electronics, filter circuits and analog-to-digital converters are in a shutdown state. The processor and support circuitry are always powered. The processor will remain in a reduced power state when not performing tasks. When the user runs a test set-up, the software automatically energizes the excitation sources and other circuits. The current draw will increase to as much as 1.4 A when the system is fully armed and powering 32 full-bridge loads.

During data collection: Once the system has been armed for data collection, all circuits remain in a full power state until the system finishes storing data. After the data collection routine has completed, the system de-energizes several circuits to minimize power consumption. It takes a maximum of 125 seconds after the end of the data storage window for the system to return to the idle state, which then allows communication and download.

Internal Battery

Each TDAS G5 Docking Station contains a 2.1 Ah, NiMH battery that operates as primary power or as back-up power should primary power fail. When fully charged, battery capacity is sufficient to provide primary power and sustain full operation for 1 hour. The internal battery charges whenever sufficient external power is connected. The ON LED indicates battery status. The maximum charge time is 10 hours from complete discharge to full capacity. It may be charged with or without a TDAS G5 DAS installed and does not need to be ON in order to charge.

Charging practices can affect the useful operational life of the battery. In addition to good charging habits, conditioning the battery may be useful—3 deep-discharge/recharge cycles may help increase battery performance. The battery's useful capacity is greatly shortened near the end of its service life and should be replaced when it has decreased to 50% of its initial capacity.

Most TDAS G5 Docking Stations—but not all—are designed to allow the user to replace the internal battery. If your docking station has a removable battery compartment cover as shown in the mechanical drawing on page 26, your battery can be replaced with minimal effort. The battery assembly is not commercially available. Contact DTS for pricing, availability, and instructions for battery replacement.

Power-up and Power-down Procedures

To start or stop the system, firmly press and hold the power switch for 3-4 seconds until the LED changes status, then release. Total time from ON initiation to system ready is ~20 seconds. Multiple units in a chain may be started in any order. When all units are ready, you can start the software.

To restart a system, turn off the unit and wait ~30 seconds (all TDAS G5 DAS LEDs are completely dark) before reinitializing. Be sure to follow proper procedures to avoid an unstable condition.

Communication Features

The 19-pin COM connectors on the control panel allow access to all communication features and status lines. These connectors are functionally identical so you may use either one to connect the communication and trigger cables provided with your system. (Please see Appendix A for the connector specifics and pin assignments.)

WARNING:

Do not apply external voltages to the event, communication, status or control output and inputs—this could result in damage to the unit.

Communication Method

The TDAS G5 Docking Station supports the industry-standard Ethernet 10/100BaseT/Tx communication method via an REC cable (P/N 10700-0015x) using either COM port. Communication is only possible when a TDAS G5 DAS is installed in the docking station. Communication is enabled after the initialization sequence has completed (~20 seconds).

Using Multiple TDAS G5 Docking Stations

TDAS G5 Docking Stations, TDAS PRO rack systems and SLICE PRO Ethernet Controllers can be interconnected in a chain to create higher channel-count systems. In this way, one docking station, rack or Ethernet Controller can act as the main terminal point for a multiple device Ethernet system. TDAS G5, TDAS PRO and SLICE PRO equipment can be daisy-chained via the COM connector using an RDC cable (P/N 10700-0014x). The procedure for the making the interconnections beings on page 8.

Auxiliary Signals

Additional auxiliary signals are available on either of the 19-pin COM connectors. These signals are:

- Start record input (optically-coupled 0-5 V signal);
- Status output (0-5 V, 20 mA output).

Start Record Input

The start record input (used only in Recorder mode) is used to send a signal to the system to begin recording data *independent* of any event signal. The desired length of recording time is entered into the software. Once the start record signal is received by the system, data is recorded only for the length of time specified. (An event signal can be used separately to facilitate post-processing of the data.) Care should be taken when using this feature so that the desired event is captured within the data window. (See your software manual for additional information.) Please contact DTS for additional information on how this may be useful in your application.

Status Output Signal

The status output signal is available for use as an indicator of system status. A typical application would be in an environment where operators may be a substantial distance away from the test equipment, in a control room or other remote location, and desire confirmation from the system that it is armed and healthy prior to testing. The table below describes this function.

Status Output Functional Description

When the docking station is not armed, the status output is always low (near 0 V), regardless of signals on the event input.

The status output will be high (near 5 V) ONLY when:

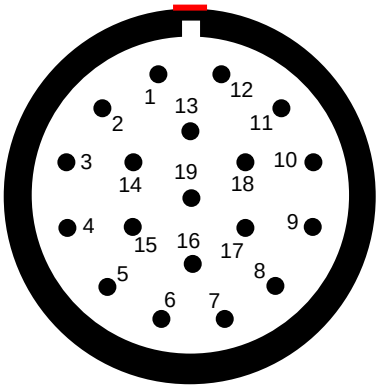
1. The docking station is armed, AND
2. The docking station is ready to record data (is in Circular Buffer mode, or has received a start signal in Recorder mode), AND
3. The docking station has not received an event signal, AND
4. The docking station's power status is within acceptable levels.

In Circular Buffer mode, the status output will go high as the system is armed. It will go low when the docking station receives an event signal, any A/D circuit stops functioning, or if the system's power is outside of acceptable limits.

In Recorder mode, the status output will remain low until the system is actually recording data. The status output will go high when the docking station receives a start record signal and all other diagnostic checks are within acceptable limits. It will go low when the docking station receives an event signal, the end of the recording time window is reached, any A/D circuit stops functioning, or if the system's power is outside of acceptable limits.

Appendix A: Control Panel Connector Information

19-pin COM Connectors
(EEG.2B.319.CLL)

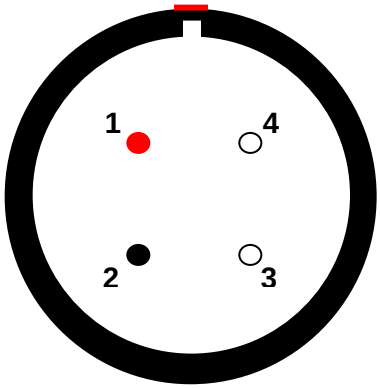


(panel view)

Suggested cable connector P/N:
FGG.2B.319.CLADxx*

Pin	Function
1	Internal function only
2	Internal function only
3	Shield
4	Start recording input, optically coupled (apply 5 V with respect to pin 16)
5	Common
6	Status output, 5 V via 110 ohm (referenced to common)
7	(+) Status input, optically coupled
8	Ethernet Tx2 (-)
9	Ethernet Tx2 (+)
10	Internal function only
11	Ethernet Rx3 (-)
12	Ethernet Rx3 (+)
13	Ethernet Tx3 (-)
14	Ethernet Tx3 (+)
15	+ Event, rack-to-rack; contact closure to pin 19**
16	(-) Common for start record and status inputs
17	Ethernet Rx2 (-)
18	Ethernet Rx2 (+)
19	- Event, rack-to-rack; contact closure to pin 15**

4-pin POWER Connector
(EEG.2B.304.CLL)



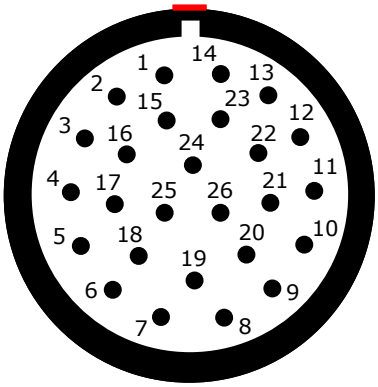
(panel view)

Suggested cable connector P/N:
FGG.2B.304.CLADxx*

Pin	Function
1	11-15 VDC input
2	- VDC input/Ground
3, 4	Ground

* xx denotes diameter of cable to be used; e.g., 52 = 5.2 mm. See www.lemo.com for more info.
** The event input is functionally identical whether using COM A, COM B, or the DIGITAL INPUT connector.

26-pin DIGITAL INPUT Connector*
(EEG.2B.326.CLL)



(panel view)

Suggested cable connector P/N:
FGG.2B.326.CLADxx**

Pin	Function
1	Digital Input 1
2	Common (1, 2, 9, 10)
3	Digital Input 2
4	Digital Input 3
5	Common (3, 4, 11, 12)
6	Digital Input 4
7	Digital Input 5
8	Common (5, 6, 13, 14)
9	Digital Input 6
10	Digital Input 7
11	Common (7, 8, 15, 16)
12	Digital Input 8
13	Digital Input 9

Pin	Function
14	Common (1, 2, 9, 10)
15	Digital Input 10
16	Digital Input 11
17	Common (3, 4, 11, 12)
18	Digital Input 12
19	Digital Input 13
20	Common (5, 6, 13, 14)
21	Digital Input 14
22	Digital Input 15
23	Common (7, 8, 15, 16)
24	Digital Input 16
25	+ Event, contact closure to pin 26***
26	- Event, contact closure to pin 25***

* No polarity requirement for simple contact closure (tape switch or other on/off device), however proper polarity must be observed when using an external semiconductor switch (Digital Input = + voltage; Common = - voltage).
** xx denotes diameter of cable to be used; e.g., 52 = 5.2 mm. See www.lemo.com for more info.
*** The event input is functionally identical whether using COM A, COM B, or the DIGITAL INPUT connector.

Suggested Connector Sources

DTS uses LEMO connectors on the TDAS G5 Docking Station. To purchase connectors, we suggest first going to LEMO directly (http://www.lemo.com/index.html). Their web site and worldwide sales team are very helpful. Should you have difficulty obtaining a specific part number, they can suggest connector variations or alternates and explain options that may be useful for your particular application. Another U.S. source is Alpine Electronics (www.alpine-electronics.com) in San Jose, California. They are a stocking distributor for LEMO and LEMO-compatible connectors.

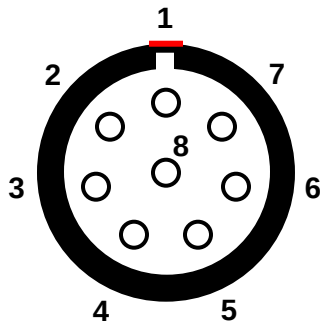
Appendix B: Sensor Connector Pin Assignments

A variety of connector options and sensor pin assignments are available. It is unlikely that you can determine what option you have by visual inspection as a connector may have more than one pin assignment option. If you need information on the specifics of your equipment, please submit a request through the DTS Help Center web portal (support.dtsweb.com) and provide the serial number(s) of the equipment and parameters you are asking about.

Some pin assignments permit multiple termination options for a signal, however you should only connect to one termination point. Do not connect any one signal to more than one location.

TDAS G5 Docking Station

EEG.1B.308.CLL



(panel view)

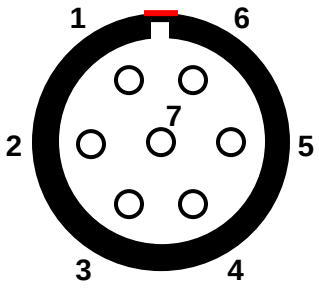
(Suggested cable connector P/N: FGG.1B.308.CLADxx*)

Pin assignments: DTS standard[01]

1	2	3	4	5	6	7	8	Case
-Ex	+Ex	-Sig	+Sig	N/C	N/C	-ID/Shield	+ID	Shield

TDAS G5 Docking Station

EEG.1B.307.CLL



(panel view)

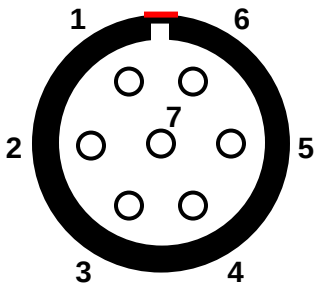
(Suggested cable connector P/N: FGG.1B.307.CLADxx*)

Pin assignments: Option A[02]

1	2	3	4	5	6	7	Case
N/C	+ID	+Sig	+Ex	-Ex	-Sig	N/C	-ID/Shield

TDAS G5 Docking Station

EEG.1B.307.CLL



(panel view)

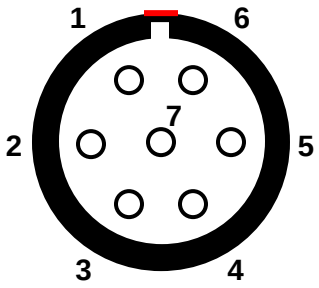
(Suggested cable connector P/N: FGG.1B.307.CLADxx*)

Pin assignments: Option D[03]

1	2	3	4	5	6	7	Case
N/C	+ID	+Sig	+Ex	-Ex	-Sig	-ID/Shield	-ID/Shield

TDAS G5 Docking Station

EEG.1B.307.CLL



(panel view)

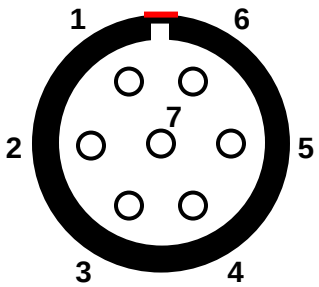
(Suggested cable connector P/N: FGG.1B.307.CLADxx*)

Pin assignments: Option E[04]

1	2	3	4	5	6	7	Case
+Ex	-Ex	+Sig	-Sig	-ID/Shield	+ID	N/C	Shield

TDAS G5 Docking Station

EEG.1B.307.CLL



(panel view)

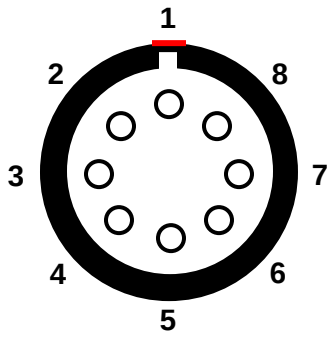
(Suggested cable connector P/N: FGG.1B.307.CLADxx*)

Pin assignments: Option E3[07]

1	2	3	4	5	6	7	Case
+Ex	-Ex	+Sig	-Sig	-ID/Shield	N/C	+ID	Shield

TDAS G5 Docking Station

EEG.2B.308.CLL



(panel view)

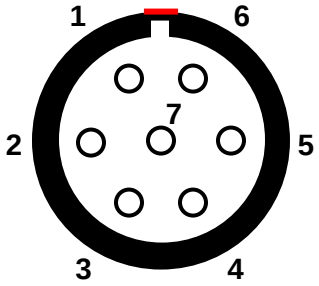
(Suggested cable connector P/N: FGG.2B.308.CLADxx*)

Pin assignments: Option G[08]

1	2	3	4	5	6	7	8	Case
+Ex	-Sig	+Sig	-Ex	Shield	+ID	-ID	N/C	Shield

TDAS G5 Docking Station

EEG.1B.307.CLL



(panel view)

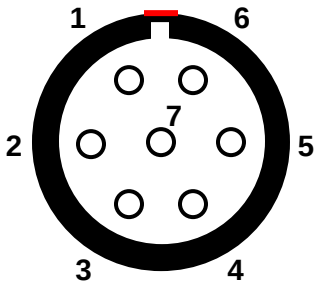
(Suggested cable connector P/N: FGG.1B.307.CLADxx*)

Pin assignments: Option H[09]

1	2	3	4	5	6	7	Case
-ID/Shield	+ID	+Sig	+Ex	-Ex	-Sig	N/C	-ID/Shield

TDAS G5 Docking Station

EEG.0B.307.CLL



(panel view)

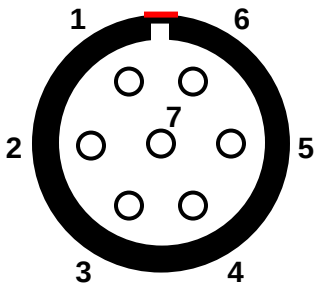
(Suggested cable connector P/N: FGG.0B.307.CLADxx*)

Pin assignments: Option M[10]

1	2	3	4	5	6	7	Case
Shield	+Ex	+Sig	-Sig	-Ex	+ID	-ID	Shield

TDAS G5 Docking Station

EEG.1B.307.CLL



(panel view)

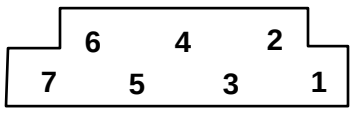
(Suggested cable connector P/N: FGG.1B.307.CLADxx*)

Pin assignments: Option X8[18]

1	2	3	4	5	6	7	Case
+Ex	-Ex	+Sig	-Sig	Shield	+ID	-ID	Shield

TDAS G5 Docking Station

3RT01-RW7F



(panel view)

(Suggested cable connector P/N: 3RT01-PE7M)

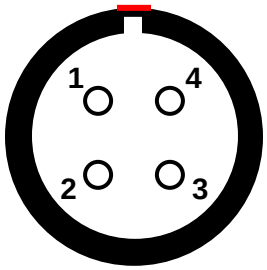
Pin assignments: Option 21

1	2	3	4	5	6	7	Case
+Ex	Shield	+Sig	-ID	-Ex	+ID	-Sig	Shield*

* Added 29 Aug 2011

TDAS G5 Docking Station

EEG.1B.304.CLL



(panel view)

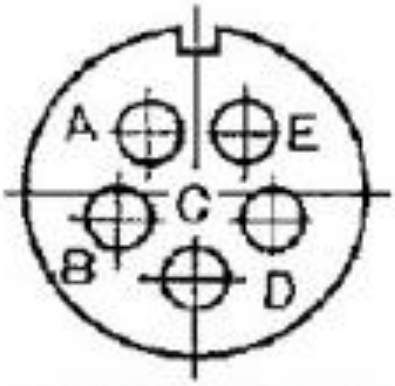
(Suggested cable connector P/N: FGG.1B.304.CLADxx*)

Pin assignments: Option 24

1	2	3	4	Case
+Ex	-Ex	+Sig	-Sig	Shield

TDAS G5 Docking Station

R05-R5F



(panel view)

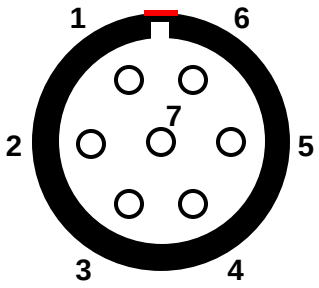
(Suggested cable connector P/N: R05-PB5M)

Pin assignments: Option 27

A	B	C	D	E
+Ex	-Sig	-Ex	+Sig	Shield

TDAS G5 Docking Station

EEG.1B.307.CLL



(panel view)

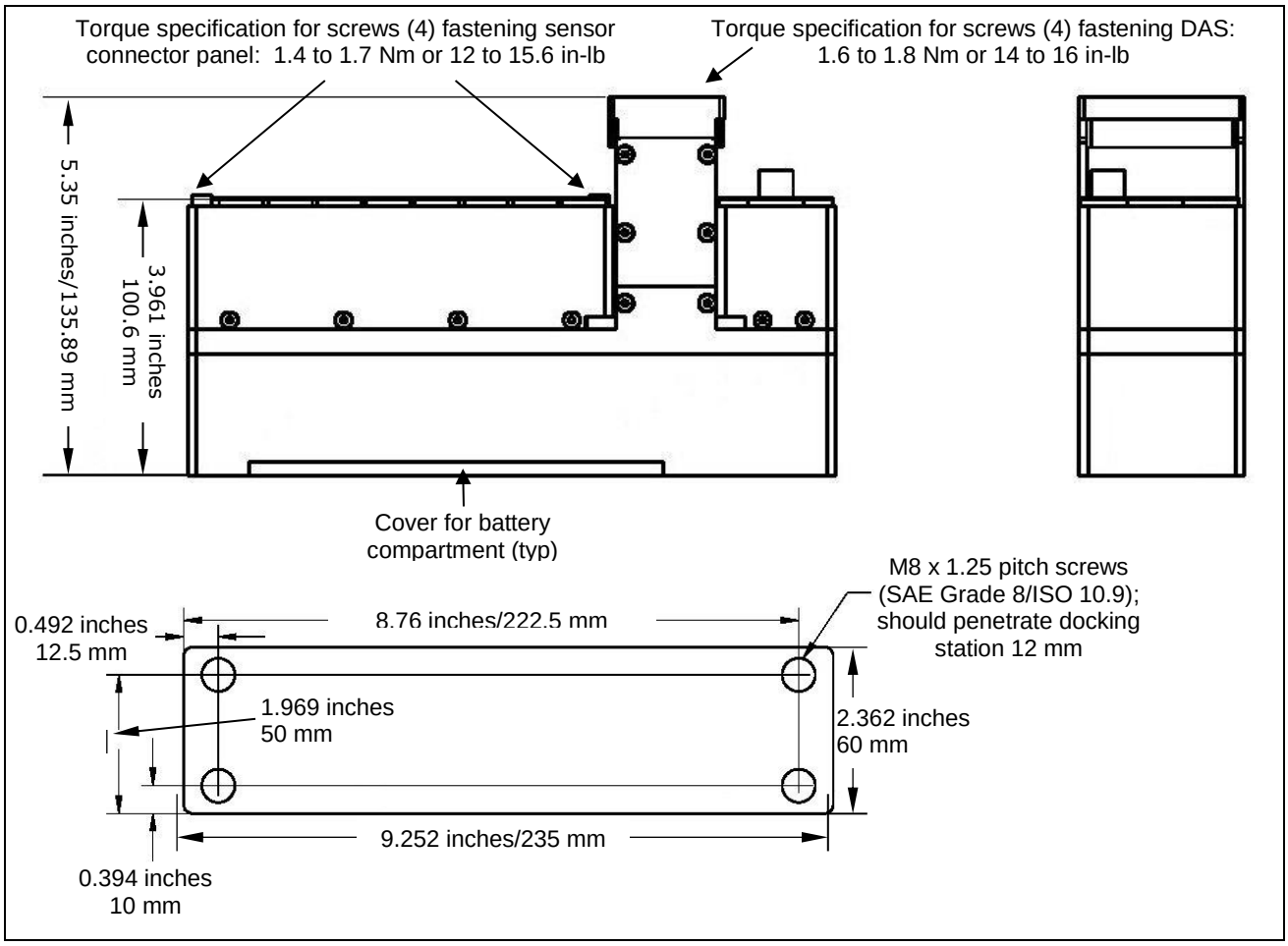
(Suggested cable connector P/N: FGG.1B.307.CLADxx*)

Pin assignments: Option 41

1	2	3	4	5	6	7	Case
N/C	- Sig	+Sig	+Ex	-Ex	+ID	N/C	-ID/Shield

Appendix C: Mechanical Specifications

Weight: ~2.7 kg (6 lb) (includes LEMO 1B sensor connector panel and TDAS G5 DAS)



WARNING:

The torque specification is critical for proper connection of the TDAS G5 DAS and sensor connector panels. If the bolts are tightened too little, good contact will not be made; if they are tightened too much, damage may result. Please use a torque wrench if possible.

Accessories/Support Equipment

10200-00020: Cable, COM port to green LED (5 m)
10400-00060: Power supply; 15 VDC, 4 A (90-240 VAC in, LEMO term) (PS-05)
10700-00070: Cable, TDAS G5 VDS digital input (DIX) (4 m, pigtail term)
10700-0014x: Cable, COM port daisy chain (RDC)
10700-0015x: Cable, PC comm, Ethernet via COM port (REC)
10700-0025x: Cable, TDAS G5 VDS event (VVB)
10700-00360: Cable, Digital Input Event Adapter (50 cm)
10700-45010: TDAS G5 VDS Base Cable Kit
10700-45020: TDAS G5 VDS Add Cable Kit
11000-00061: TDAS G5 Digital Input Terminal (16 ch) (screw terminals)
11000-00080: TDAS G5 VDS Sensor Connector Panel, DTS std option
11000-00081: TDAS G5 VDS Sensor Connector Panel, Option A
11000-00082: TDAS G5 VDS Sensor Connector Panel, Option D
11000-00083: TDAS G5 VDS Sensor Connector Panel, Option G
11000-00084: TDAS G5 VDS Sensor Connector Panel, Option H
11000-00085: TDAS G5 VDS Sensor Connector Panel, Option 24
11000-00086: TDAS G5 VDS Sensor Connector Panel, Option E
11000-00087: TDAS G5 VDS Sensor Connector Panel, Option E3
11000-00088: TDAS G5 VDS Sensor Connector Panels, Option 21
11000-00089: TDAS G5 VDS Sensor Connector Panel, Option 27
11000-00210: TDAS G5 VDS Sensor Connector Panel, Option M
11000-00211: TDAS G5 VDS Sensor Connector Panel, Option 18
11000-00212: TDAS G5 VDS Sensor Connector Panel, Option 41
11000-00180: TDAS G5 VDS Strain Gage Termination Pendant (16 ch)
11000-00190: TDAS G5 VDS Strain Gage Conn Panel Set (120 Ω, ch 1-16 & 17-32)
11000-00191: TDAS G5 VDS Strain Gage Connector Panel (120 Ω, ch 1-16)
11000-00192: TDAS G5 VDS Strain Gage Connector Panel (120 Ω, ch 17-32)
11000-00240: TDAS G5 VDS Strain Gage Conn Panel Set (350 Ω, ch 1-16 & 17-32)
11000-00241: TDAS G5 VDS Strain Gage Connector Panel (350 Ω, ch 1-16)
11000-00242: TDAS G5 VDS Strain Gage Connector Panel (350 Ω, ch 17-32)
13000-30860: Cable, COM port to status LED + event input pigtails (5 m)

(x = multiple lengths available)

Revision History

Date	By	Description
20 Mar 2017	EK	Reorganized content. Revised format and boilerplate material. Expanded "Digital Input" section and revised pin assignments. Appendix C: Updated weight to include DAS; added mounting bolt grade and "Accessories/Support Equipment" section. Added Appendix B. Added revision history. (Rev 3)
21 Dec 2004	EK	(Rev 2)
21 Aug 2003	GW/SP	(Rev 1)
		(Rev 0)