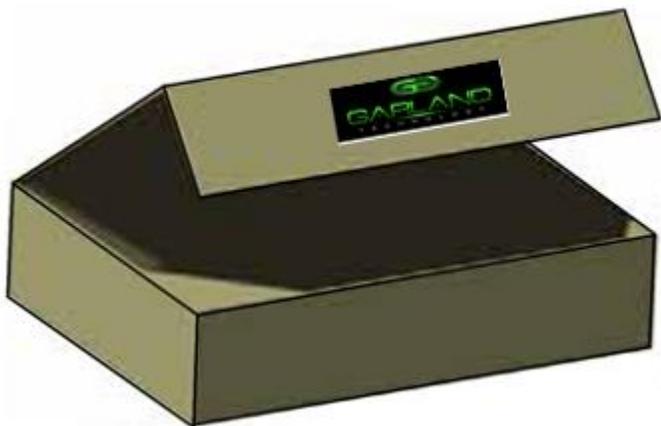
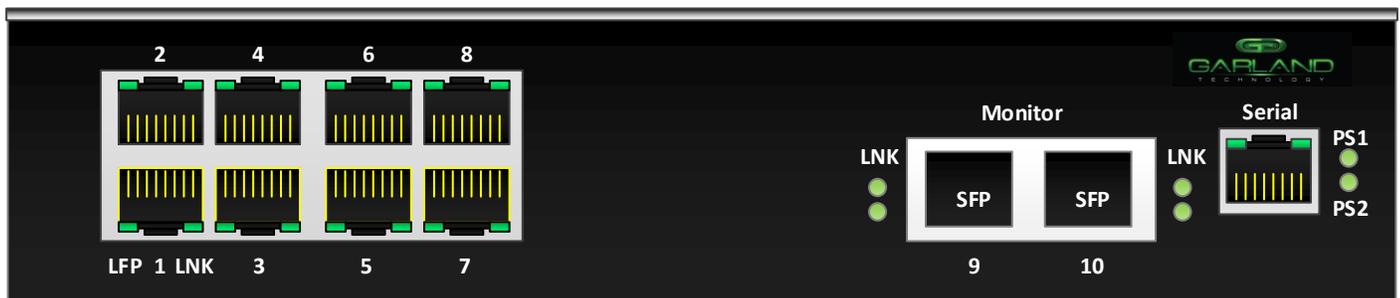


# Garland Technology INT1G10CSA Quick Start Guide



**Flexible TAP system capable of aggregating up to four (4) 1GbE links to two monitoring port.**

# Garland Technology INT1G10CSA Quick Start

## List of components supplied

The components supplied with each Garland Technology's INT1G10CSA 1GbE Aggregator are listed below. If any component is found to be missing, damaged, not working, or otherwise faulty, please report it immediately to Garland Technology Technical Support.

See *Contacting Technical Support* on page 6.

- 1 x INT1G10CSA Aggregator TAP System
- 1 x Rack mounting kit (brackets and screws)
- 2 x Power leads
- 1 X Ethernet Cable RJ-45 X RJ-45
- 1 x Connector cable RJ-45 x DB9 for management

If the Chassis is DC powered, see connection instructions below.

## Rack-mounting the chassis

This section describes how to mount the INT1G10CSA System into a 19" Rack. Follow the usual security precautions.

### To rack mount the INT10 Unit:

- 1 Unpack the GT INT1G10CSA unit and place it on a suitable work surface.
- 2 Attach the two mounting brackets supplied to the side of the INT10 chassis.
- 3 Slide the chassis into your server rack and secure it with screws (not supplied).
- 4 Attach the power leads to *separate* power sources. The unit is able to work with a single power lead, but two leads connected will help safeguard the device against power failure.

## Attaching power cables

The Garland Technology INT1G10CSA Aggregator TAP system is equipped with dual internal power supplies. Only one power cord is necessary to operate the unit but to provide added reliability, it is recommended that you plug each power cord into two independent power sources. If connecting to a DC power supply, you must follow the instructions below to ensure your safety as you wire the unit into an appropriate circuit.

### To wire a DC power supply:

1. Verify that power is **off** to the DC input circuit.
2. Attach the appropriate ring fixings to the DC input wires.
3. From the bottom of the terminal block wire the DC input power supply to the terminal block as follows:



- Ground wire to Ground terminal (left)
- 48V return to "+" terminal (center)
- 48V wire to "-" terminal (right)

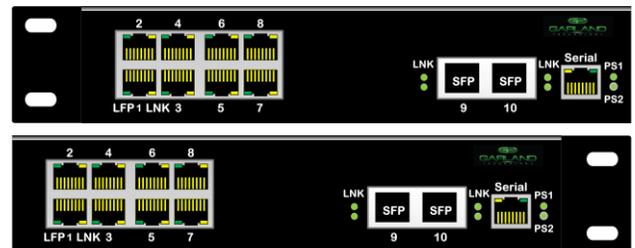


Figure 1: INT1G10 Integrating TAPs with Left and Right Mounting TABs

**Caution:** Before performing this procedure, ensure that all power is off to the DC circuit of the power supply being added or removed. Locate the circuit breaker on the panel board that services the DC circuit and switch it to the **off** position. Tape the circuit breaker switch handle in the off position to prevent accidental closing of the circuit.

## INT1G10CSA Aggregating TAP Flow Diagram

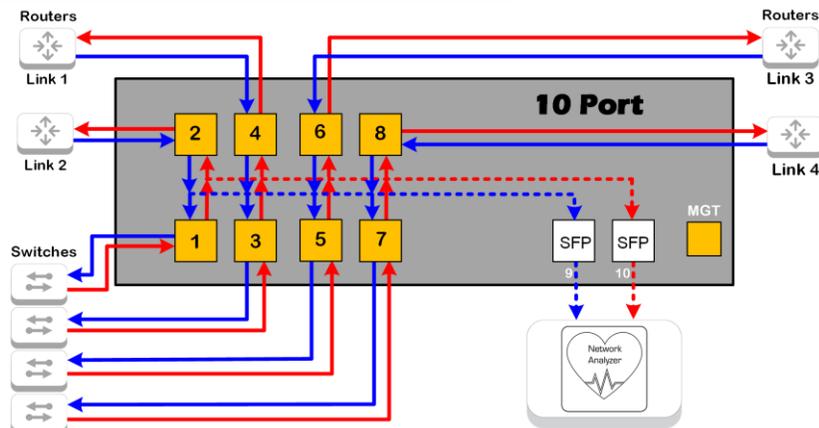


Figure 2: INT1G10CSA Aggregating TAP Flow Diagram

## Serial Console Configuration

The settings to connect to the Serial Console are the following.

Bits per second: 19200  
Data bits: 8  
Parity: None  
Stop: 1  
Flow Control: None

### Console Settings

Baud Rate: 19200  
Data Bits: 8  
Stop Bits: 1  
Parity: None  
Flow Control: None  
Login: admin | gtdadmin1  
Interface: Menu Driven

Users may login with user “admin” and password “gtdadmin1”.

Figure 3: Connection parameters

The Login username for the INT1G10XX is “admin” and password is “gtdadmin1”. The first menu to come up is the main menu:

```
Garland Technology 10 Port Aggregating TAP (Code Version: 1.1.28)
Enter Username: admin

Enter Password: *****

Main Menu

Select:
1. View System
2. Change/View Configuration
3. Change Username/Password
4. Restore Factory Defaults
0. Logout
```

Figure 4: Main Menu

This is the main menu. Simply press the number of the function that you wish to change

**Selecting 1. View System brings up the following screen:**

```
Garland Technology 10 Port Aggregation TAP (code Version 1.012)

Power Supply 1: Up
Power Supply 2: Down
Serial Number: 2084-0012345
Pass CRC Error Packets is turned: Off

-----
|   Network   |   Network   |   Network   |   Network   |   Monitoring | | | | | |
| Port 1|Port 2|Port 3|Port 4|Port 5|Port 6|Port 7|Port 8|Port 9|Port 10|
|   UP   | Down  |   UP   | Down  |
|   Gbit |      |   Gbit | Gbit  | Gbit  | Gbit  | Gbit  | Gbit  | Gbit  |      |
|   FULL |      |   FULL | FULL  | FULL  | FULL  | FULL  | FULL  | FULL  |      |
-----

Press any key to return to Main Menu
```

Figure 5: View System

**Selecting 2 of Main Menu brings up the Change/View Configuration Menu Screen below:**

**This is the configuration menu. Press the number of the function that you wish to change.**

```
Change/View Configuration Menu:

Press
1:Setup Network (TAP) Ports
2: Select Ports to Monitor on Port 9
3: Select Ports to Monitor on Port 10
4: Error frames setup
0: Exit
```

**Figure 6: Port Set up Menu**

**Selecting 1 in the Change/View Configuration Menu will bring up the Setup Port Pair screen to select the port pair you wish to set up. Select the port pair and the 1 & 2, 3 & 4, 5 & 6 and 7 & 8 respectively. Allows you to change the parameters to what your network requires for each port pair. Once you select a port pair, Fig 8 is what each page will look like.**

```
Setup Ports Configuration Menu

Press
1: Setup Port Pair 1&2
2: Setup Port Pair 3&4
3: Setup Port Pair 5&6
4: Setup Port Pair 7&8
0. Exit
```

**Figure 7: Select Port Pair Menu**

```
Setup Port Pair 1 & 2 Speed/Duplex Parameters
Port Pair 1 & 2 are set to: 1G Autonegotiate
LFP: On

Press
1: Autonegotiate 1G
2: Autonegotiate 100M
3: Autonegotiate 10M
4: Forced Gbit Full Duplex
5: Forced 100 Mbit Full Duplex
6: Forced 10 Mbit Full Duplex
7: Toggle LFP On/Off
p: Turn SPAN mode On
s: Turn Auto-Sysc On
0. Apply and Exit
```

**Figure 8: Set up for port parameters 1 & 2**

**Note -** Pressing an Autonegotiate selection only advertises full duplex connections. This device can negotiate to half duplex in any speed while in the sync mode.

Selecting 2 or 3 on the Change/View Menu brings up this screen. It allows you to connect the network ports to monitor ports 9 or 10 (there is an identical screen for port 10), if there is an asterisk next to the port number then it is monitored, pressing the port number will toggle it on or off.

```
Select Ports to Aggregate out to Port 9
*means Port will be monitored by Port 9
Port 1:          *
Port 2:          *
Port 3:          *
Port 4:          *
Port 5:          *
Port 6:          *
Port 7:          *
Port 8:          *
Port 10:         *

Press
1: Port          1 ON/OFF
2: Port          2 ON/OFF
3: Port          3 ON/OFF
4: Port          4 ON/OFF
5: Port          5 ON/OFF
6: Port          6 ON/OFF
7: Port          7 ON/OFF
8: Port          8 ON/OFF
A: Port          10 ON/OFF
0: Apply and Exit
```

Figure 9: Tie Network Ports to monitor ports 9 or 10

Selecting 4 on the Change/View Menu brings up this screen where you would select to pass or not pass error packets

```
Pass CRC Errored Packets
Pass Errored Packets is: On

Press
1: Toggle Pass Errored packets
ON/Off
0. Apply and Exit
```

Figure 10: Allow or inhibit error frames

```
Username/Password

Select:

1. Change Username
2. Change Password
0. Return
```

Selecting 4 on the Main Menu brings up the Username/ Password Menu. This Menu set is where you would enter a new Username or Password.

Change Username

Change Password

Enter New Username:

Enter New Password:

Figure 11: Make selection to change Username or Password

This screen Allows you to reset to default setting.

```
Restore Defaults Menu

Select:

1. Restore Factory Defaults
Config
0. Exit with no change
```

Restore Defaults Menu

Are you sure you want to restore factory defaults?

**Please note:** restoring Factory Defaults requires a power cycle at the end of the procedure.

- 1. Restore Factory Defaults
- 0. Exit with no change

Figure 12: Reset settings to factory default

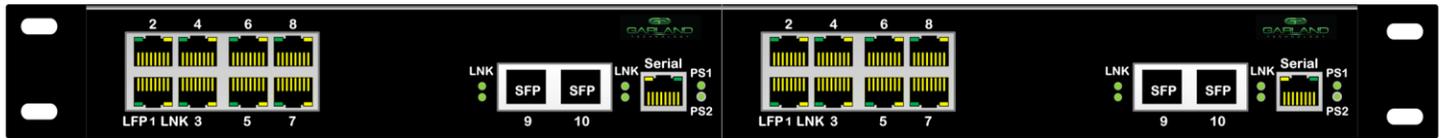


Figure 13: Two INT1G10CSA Integrated TAP systems side by side – requires 1U rack space

## Understanding the operational possibilities of the Garland Technology INT1G10CSA Aggregating TAP System

- The unit has 4 taps in it. The following COPPER port pairs are what we call "network ports": 1&2 3&4 5&6 7&8 – These port pairs are Fail-Safe. i.e. When the unit loses power ports 1&2 fail close. Likewise ports 3&4, 5&6 and 7&8 fail close.
- The other two ports, 9 &10, can be used as monitoring ports.
- The user may use port 10 as a monitor port and tap ports 1 through 9. Or
- The user may use port 9 as a monitor port and tap ports 1 through 8 and port 10. Or
- The user may use both ports 9 and 10 as monitor ports and do the following:
- One could take east-west traffic out port 10 and west-east traffic out port 9. The mapping would look like this:
  - 1&3&5&7 > 10      2&4&6&8 > 9
- You can have any mapping - for example, you can aggregate, not just breakout as the previous example (actually the previous example aggregates too):
  - 1&2&3&4 to 10      5&6&7&8 to 9
- Port 9 can have port 10 mapped to it and port 10 can have port 9 mapped to it. This allows us to do the following:
- The INT1G10 port takes 1/2 of a 1U rack (horizontally). Thus we can have two of the INT1G10 ports in a 1U rack space. You could have 8 taps using ports 1 through 8 on both units. Port 10 on unit 1 could be attached to some tool. Port 9 on that unit can be configured as an input and receive the aggregated traffic from the other unit.

**Contacting Technical Support:**  
 Tel: 716.242.8500  
 Email Address: [support@garlandtechnology.com](mailto:support@garlandtechnology.com)